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ILS ELEMENT E11
DESIGN INFLEUNCE
--
Distribution Program and
User's Manual
Version 1.0

APJ 966-676

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RESEARCH

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This User's Manual is the complete user documentation package, and is
provided for guidance in using the APJ software. This User's Manual refers
to Version 1.0 of the ILS Assessment software. The software permits you
to carry out a coherent, orderly and reproducible assessment of ILS Element
E11, Design Influence. The software automates the assessment of ILS Element
E11, "Design Influence" and follows the requirements of APJ Report 966-224,
Structured Design - ILS Review Element E11 - Design Influence. It is
designed to assess ILS performance as defined in AR 700-127. ILS software
guides the user through the assessment by providing a series of questions
which may readily be tailored to the weapon system and life cycle stage.

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ILS ELEMENT E11 DESIGN INFLUENCE

Distribution Program and User's Manual
Version 1.0

under

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for

HQ US AMCCOM
INTEGRATED LOGISTIC SUPPORT OFFICE
AMSMC-LSP
ROCK ISLAND, IL

by

AMERICAN POWER JET COMPANY

RIDGEFIELD, NJ   **ST. LOUIS, MO**

WILLIAMSBURG, VA   **ARLINGTON, VA**

April 1991

PLEASE READ THIS

This manual is intended to demonstrate the ILS Assessment Software and aid the user in becoming familiar with its operation. The screens illustrated in this manual, are intended as a guide to help the analyst through the software operation and provide a sense of "what it looks like". The following ILS review areas have been made the subject of automation:

    E1 - Maintenance Planning
    E11 - Design Influence
    E12 - Standardization and Interoperability
    E13 - RAM-D
    E14 - Support Management and Analysis
    E15 - Cost Analysis and Funding

Because a single automated procedure with a consistent human interface is the objective of APJ's efforts, the analysis structure, screens and operating procedure are identical for each ILS assessment area.

To avoid cumbersome repetition, we have used E1 Maintenance Planning as illustrative displays for all manuals regardless of subject.

The specific assessment questions for each of the other ILS areas (E1, E11, ... etc.) are set forth in the respective automated screens, reports, and Help. To facilitate review and planning of each assessment task, the Data Flow Diagrams and questions are reproduced in Appendices A and B respectively of the manual corresponding to the given task.

The information contained in this manual is generic, and is weapon system and life cycle phase independent. It is designed to be readily structured for any specific weapon system and life cycle stage, and facilities are provided to tag each pertinent question so that attention may be focused on remunerative issues.

FOREWORD

This manual supports the automation of the Structured Analysis of Integrated Logistics Support (ILS) functions. It is the complete user documentation package, and is provided solely for guidance in using the APJ software.

The ILS assessment software is a unified and iterative approach to the management of logistic support throughout the life of a Weapon System. It enables the user to review logistic support decisions and, if required, establish corrective actions.

The automated ILS system is being developed by the American Power Jet Co. (APJ), under contract to Hqs AMCCOM. A major goal of the project is to unify the military and contractor approach to the performance of ILS. This approach was validated by AMCCOM, and necessary adjustments were made to attain a fully useful and user-friendly program.

APJ has used Structured Analysis and Design to develop the ILS assessment logic in accordance with AR 700-127 "Integrated Logistic Support".

The Structured Analysis and Design for ILS Element E11 (Design Influence) was presented in APJ Reports 966-212 and 966-224. APJ's task performance has been closely coordinated with the Army Logistic Evaluation Agency and AMCCOM. Their assessment experience has been captured in APJ's logic through continued coordination and review at the working level.

The application software functions as an automated assessment technique and data repository that insures the ILS review is complete and yields actionable results. The assessment logic provides a determinate definition of data requirements, detailed implementation processes, and standard output reports. Additionally, a cost, performance, and schedule risk module has been created for each process.

The ILS assessment software is available through HQ AMCCOM, AMSMC-LSP to program managers, ILS functional area representatives, and review activity personnel. It provides guidance and a means of assessing ILS performance by using the automated assessment procedure. Through the use of this procedure, problems may be quickly identified and resolved before testing and milestone reviews.

The Structured Analysis for ILS Element E11, Design Influence contains the following nine (9) major modules:

1. Design Review Personnel
2. Select Applicable Review Area
3. Assess MANPRINT Influence on Design
4. Safety Influence
5. Assess Technology Influence on Design
6. Assess RAM Influence on Design
7. Assess Interface Influence on Design
8. Assess Economics Influence on Design
9. Assess Program Procedure Influence

NOTE

A bar in the left hand margin of any paragraph indicates changes from the Beta Test version of this manual.

All comments on this version are welcome and should be addressed to:

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CHAPTER 1

INTRODUCTION

1.1 GENERAL.

USER'S
GUIDE

1.1.1 This User's Manual accompanies Version 1.0 of the ILS Assessment software. The software permits you to carry out a coherent, orderly and reproducible assessment of ILS Element E-11, Design Influence. It is part of an APJ originated structure for addressing all of the ILS areas in AR 700-127.

1.1.2 This is designed to serve activities concerned with assessing ILS performance as defined in AR 700-127 and establishing its cost, schedule, performance and sustainability implications. Provision is made for such assessments at both the overall and detailed levels.

1.1.3 The user is guided through a series of questions which may readily be tailored according to the weapon system characteristics and life cycle stage. The overall set of questions and their organization are provided in Appendices A and B.

1.1.4 An important feature is a fully articulated guide to performing the assessment through a system of help screens, with a hypertext selection menu. This help system may likewise be tailored to the specific weapon system and life cycle stage.

1.2 SCOPE.

COVERS
AR 700-127

1.2.1 The Department of the Army has a requirement for management control of contractor and government requirements for implementation of AR 700-127, (Integrated Logistic Support). Headquarters AMCCOM has initiated action to structure the review of each ILS element, as to the form of the results and the detailed processes involved. This action is necessary to ensure consistency with current US Army policies, procedures and techniques.

REVIEW SCOPE

1.2.2 This computer-assisted system will result in uniform development of a logistical database. It addresses all aspects of the ILS assessment elements, as set forth in Department of Army and Department of Defense administrative publications. Furthermore, it will insure uniformity in efforts and products, reproducibility of analyses, and a well defined structure. This system can be coordinated among all participants in the logistic process to arrive at standardized procedures and a common basis for understanding assessment results.

GENERIC MANUAL

1.2.3 This user's manual is baselined on ILS Assessment Element El, Maintenance Planning. The examples of screens and reports shown in this manual are intended to illustrate the operation of the software independent of the assessment element. The process titles may be different is the various element, but the operation is unchanged.

1.3 ILS REVIEW LOGIC AND ORGANIZATION.

1.3.1 This software automates the assessment of ILS Element E11 - "Design Influence" and follows the requirements of APJ Report 966-224, "Structured Design-ILS Review Element E12-Design Influence".

1.3.2 A detailed Structured Analysis of this review element was developed in APJ report 966-212, "ILS Review Element E11". The detailed Data Flow Diagrams (DFDs) from this Structured Analysis are included as Annex A to this manual, and provide the user with an overview of the logic and approach taken with the analysis.

1.4 ILS SOFTWARE ARCHITECTURE

1.4.1 The overall concept of assessment is illustrated in Figure 1-1 and is weapon system and life cycle phase independent. ILS software is designed to guide the user through an assessment by providing a series of questions for the analyst to answer. The analyst must select the equipment to be assessed and enter an identification before

reaching the main menu. From the main menu the user can either perform an assessment or generate a report using data from previous assessments.

1.4.2 During the process of performing an assessment, the user is guided through a series of processes and/or subprocesses that enable him to select a question to be answered. Once a question is selected, the user selects one of several possible responses. After responding to the question the user enters an assessment of the selected answer.

1.4.3 From the main menu the user can generate a report of the information that has been entered during a current or previous sessions. The output
PROGRAM   of the generate report can be directed to a printer, screen or stored as a file.

1.5 SOFTWARE PROVIDED.

1.5.1 The ILS Review Element E11 — Design Influence software is loaded on 360K 5-1/4 inch floppy disks that are provided separately. Refer to Chapter 2 for the equipment required to run this software.
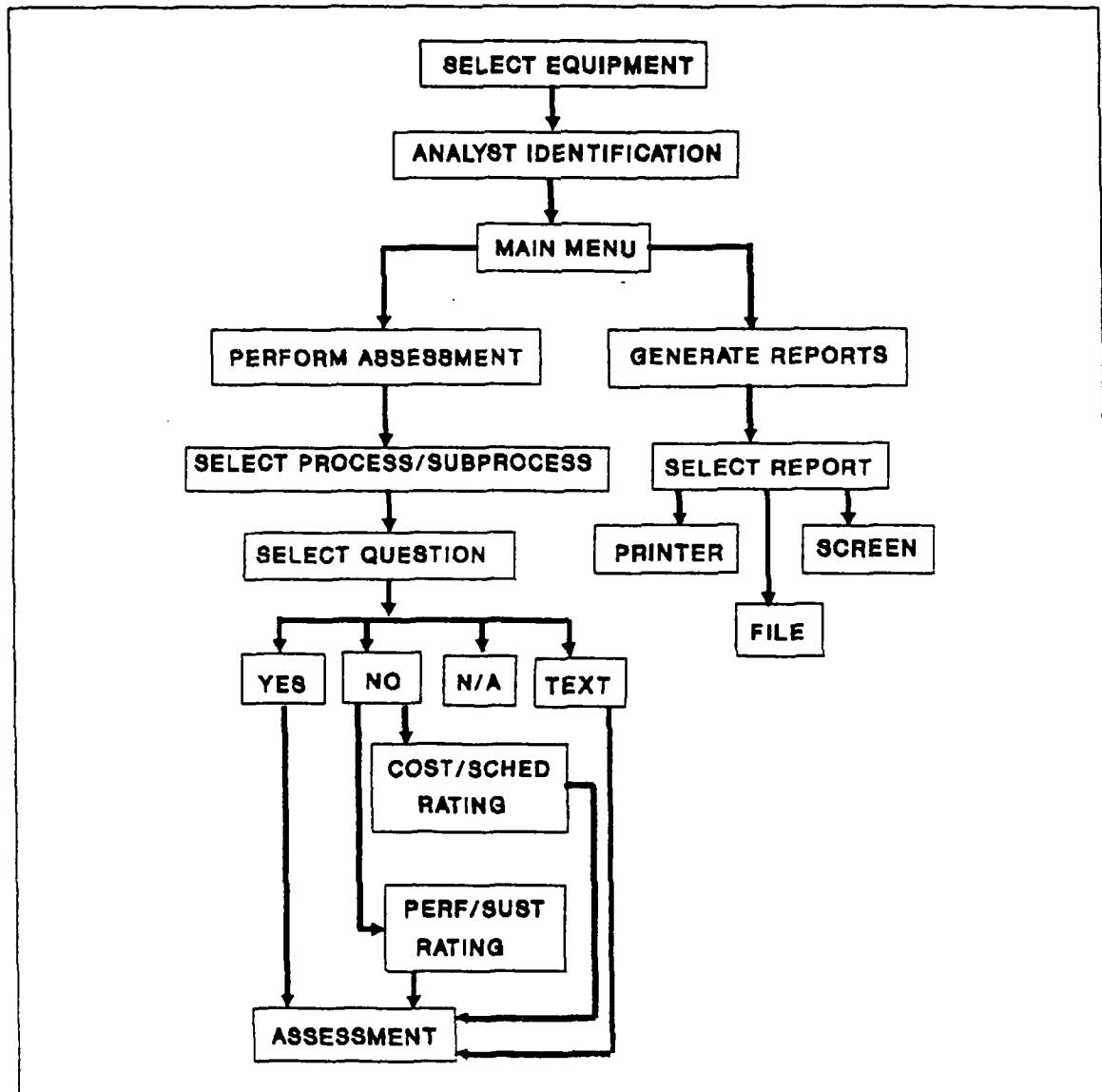
Figure 1-1. ILS Software Architecture

CHAPTER 2

SOFTWARE INSTALLATION
AND BACKUP

2.1 GENERAL

2.1.1   This chapter describes the installation of the executable software and the procedures for making a backup file.

2.2 EQUIPMENT REQUIREMENTS

2.2.1   To operate the ILS Review Element El software, the user must be equipped with at least the following equipment, or its equivalent.

HARDWARE

1. IBM-PC-XT with DOS version 3.3 or later and 640K RAM
2. 360K or 1.2MB Floppy Disk Drive and 20MB Hard drive
3. Printer: The following printers are supported by the software printer drivers

   Epson E/F/J/RX/LQ
   HP Laserjet 500/+/II
   IBM 80 CPS Matrix

NOTE

If your printer is not one of those listed, select the "IBM 80 CPS Matrix" which allows you to tailor the report generator for any printer.

POWER

2.3 POWER ON/OFF

2.3.1   Since each system is slightly different, follow the manufacturer's specific start-up instructions for the personal computer being used to perform the assessment. Make sure that both the Central Processing Unit (CPU) and the Monitor are powered up.   Proceed to the system installation section for the instructions on installation of the Logistics Assessment Software.

2.4 SYSTEM INSTALLATION

MAKE DUPLICATE COPY OF DISKS

2.4.1   This section describes the procedure to load the executable software residing on the floppy disk onto the computer's hard disk and instructions for making copies of the executable program and associated data bases for field use.

2.4.2   Before installing the software for the first time, duplicate the supplied disks. Apply write protect tabs to the original disks and store in a safe place.   Use the copy of the software for system installation.

MODIFY CONFIG.SYS

2.4.3   In order for the ILS software to operate properly, the CONFIG.SYS file must contain the statements: FILES=50 and BUFFERS=20. Add these statements to the indicated files if they do not already exist.

2.5 INSTALLATION ON A HARD DISK.

HARD DISK

2.5.1   To install the software on a hard disk of the personal computer, perform the following procedures.

1.   Turn the computer and monitor on. The computer should boot-up and the hard disk drive prompt (usually C:\) should appear on the screen.

2.   Insert the copy of disk 1, ILS Assessment Software, into Drive A.

3. After the C:\ prompt, type "MD C:\ILS" and press <Enter>. This creates an ILS directory on the hard disk and the C:\ prompt will appear.

4. Type "Copy A:*.* C:\ILS" and press <Enter>. This copies all of the files from the Logistic Assessment Software floppy disk into the ILS directory on the hard disk.

5. Upon completion of copying the files into the ILS directory, the C:\ prompt appears. Remove the software disk just copied from Drive A and store in a safe place.

6. Insert the copy of each disk provided into Drive A, and repeat steps 4 and 5.

IMPORTANT INSTALLATION NOTE

For ILS Assessment Software, E11-Design Influence, the QLIST.DBF and QLIST.DBT files have been compressed into a single file named QLIST.COM, to fit on a 360K floppy disk. QLIST.COM is a self-extracting file to install this file and extract the two QLIST files follow these instructions:

1) At the C:\ILS prompt type *Copy A:\QLIST.COM* and press *<Enter>*. This will copy the compressed file from the floppy disk to the ILS directory.

2) Type *QLIST* at the C:\ILS prompt and press *<Enter>*. This causes the execution of the self-extracting archived file to generate two files (QLIST.DBF and QLIST.DBT). Type *DEL QLIST.COM* and press <Enter> to delete the self-extracting compressed file. It is no longer needed.

3) Continue with the normal installation procedures found in Chapter 2.

2.6 INSTRUCTIONS FOR FIELD USE.

WORKING COPY

2.6.1 The following procedures are for copying the ILS assessment software onto a single 1.2MB floppy disk from the computer's hard disk drive. This provides a working copy of the software for use at a field location, or on a laptop computer. Refer to paragraph 2.7 for procedures to copy the ILS assessment software onto 360K floppy disks.

1. Turn the computer and monitor on. The computer should boot-up and the hard disk drive prompt (usually C:\) should appear on the screen.

2. Insert a 1.2 M blank formatted floppy disk into Drive A.

3. After the prompt type "Copy C:\ILS*.EXE A:"and press <Enter>. This copies the executable file from the ILS directory onto the disk in Drive A.

4. After the prompt type "Copy C:\ILS*.DBT A:" and press <Enter>. This copies the files from the ILS directory onto the disk Drive A.

5. After the prompt type "Copy C:\ILS*.DBF A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

6. After the prompt type "Copy C:\ILS*.MEM A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

7. After the prompt type "Copy C:\ILS*.RTL A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

8. After the prompt type "Copy C:\ILS*.TXT A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

9. After the prompt type "Copy C:\ILS*.OVL A:" and press <ENTER>. This copies the files from the ILS directory onto the disk in Drive A.

10. Remove the disk from Drive A. Label this disk with file identification and date. This is the working copy that can be used at a field location to perform an assessment.

2.7 MAKING A FIELD COPY

360K
FIELD
COPY

2.7.1   The following procedures are provided for copying the ILS assessment software onto multiple 360K floppy disks from the computer's hard disk drive.

1. Turn the computer and monitor on. The computer should boot-up and the hard disk drive prompt (usually C:\) should appear on the screen.

2. Insert a 360K blank formatted floppy disk into Drive A.

3. After the prompt type "Copy C:\ILS*.EXE A:" and press <Enter>. This copies the executable file from the ILS directory onto the disk in Drive A.

4. Remove the disk from Drive A and insert a new 360K blank formatted disk into Drive A. Label this disk with file identification and date.

5. Repeat the procedures of steps 2 through 4 using the following commands to copy the files to the disks.

NOTE

More than one disk is required during the process of copying the following files.

---

a. After the prompt, type "Copy C:\ILS*.DBT A:".

b. After the prompt, type "Copy C:\ILS*.DBF A:".

c. After the prompt, type "Copy C:\ILS*.MEM A:".

d. After the prompt, type "Copy C:\ILS*.OVL A:".

e. After the prompt, type "Copy C:\ILS*.TXT A:".

2.8 SOFTWARE BOOT-UP PROCEDURE

BOOT-UP FROM HARD DRIVE

2.8.1 The following procedures should be followed each time the software is initiated. Paragraph 2.9 contains procedures for using a hard disk drive, and paragraph 2.10 contains procedures for using a floppy disk.

2.9 BOOT-UP SOFTWARE USING HARD DISK

2.9.1 The following procedure is used for accessing software installed on the computer's hard disk drive.

1. Turn the computer and monitor on. The computer will boot-up and the hard disk drive prompt (usually C:\) will appear on the screen.

2. Type "CD\ILS" and press <Enter> to change to the ILS directory. C:\ILS appears on the screen.

3. Type "ILS" and press <Enter>. The program is now initialized and an introductory screen appears. Refer to Chapter 3 for identification of screens, and Chapter 4 for instructions on performing an assessment.

2.10 BOOT-UP PROGRAM USING FLOPPY DISK.

BOOT-UP FROM FLOPPY

2.10.1 The following procedure is used for accessing the program from a floppy disk.

1. Boot-up the computer with the DOS system disk.

2. Insert program disk into Drive A.

3. At the A drive prompt, type "ILS" and press
    <enter>. The program is initialized and the
    ILS screen appears. Refer to Chapter 3 for
    identification of screens, and Chapter 4 for
    assessment entering procedures.

2.11 CREATING BACK-UP FILES

2.11.1 At the end of a day, make a back-up copy of
the files. The back-up disk may be useful under
the following conditions:

(1) If there is a computer hardware problem and
     another computer is used.
(2) Data files are corrupted or become otherwise
     unusable and restoration of the files is
     required.
(3) Transportation of the files from the user
     site to another management site.

*PRE-
BACKUP
INSTRUC-
TIONS*

2.11.2 Prior to creating any back-up files that
will be restored to another machine, the analyst
must ensure that:

1. Formatted disks are available.

2. The machine that the back-up will be
    restored to has a DOS release version that is
    equal to or higher than the DOS release version
    on the back-up machine.

3. The backup and restore .COM files are in a
    directory specified in the autoexec.bat file
    path. If not, the complete paths for the
    back-up and restore must be specified at the
    time each is processed.

2.11.3 Perform tne following procedures to create a
back-up disk:

*BACKUP
PROCE-
DURES*

1. At the end of a session, place a formatted
    disk in Drive A. <Exit> from the ILS program
    to return to the C:\ILS DOS prompt.

2. Type "BACKUP A:\ILS" and press <Enter> to
    create a set of back-up disks.

3. Remove the back-up disks from Drive A, label
    and date them. No more than two days' worth
    of files should be maintained on such back-
    up disks. On the third day, the back-up
    files made two days ago should be updated and
    overwritten.

2.12 RECOVERY PROCEDURES

RESTORE

2.12.1   When file restoration is required, place
the latest backup disk in drive A and type "RESTORE
A:C:\ILS/S" and press <Enter>. The files will be
restored.

RECOVERY
FROM
CORRUPTED
INDEX
FILES

2.12.2 If one or more index file associated with
the data bases becomes corrupted, use the utility
program procedures described in paragraph 3.4.3.

NOTE

Re-indexing and packing is recommended at
least every 2-3 days.

2.12.3 The following is a list of files comprising
the ILS Review/Software.

FILE
NAMES

ANALYST.DBF	HELPILS2.TXT	QLIST.DBT
CHOICEN.DBF	ILS.EXE	REPWELC.MEM
CHOICEN.DBT	ILSYS.OVL	RESPONSE.DBF
CHOICET.DBF	ILSYS2.OVL	RR_PR1.MEM
CHOICET.DBT	INSTR.TXT	SESSION.DBF
CHOICEY.DBF	INTRO.TXT	SUBROC.DBF
CHOICEY.DBT	PROCESS.DBF	SUMMARY.DBF
EQUIP.DBF	PROCLOOK.DBF	SUMMARY.DBT
HELPILS.TXT	QLIST.DBF	WELC.MEM

CHAPTER 3

START-UP
OPERATIONS

3.1. INTRODUCTION.

BACKGROUND

3.1.1 The U. S. Army ILS Assessment Software is an interactive menu driven system. The software is accessed by completing a series of identification screens prior to accessing the Main Menu. From the Main Menu, you can perform an assessment, generate reports, obtain help, or exit the program. This chapter explains the purpose of each screen and the required response.

3.2 EQUIPMENT IDENTIFICATION SCREEN.

3.2.1 After system initialization, the introductory screen appears. When any key is pressed, the Equipment Identification Screen appears as shown in Figure 3-1.

EQUIPMENT SIGN-ON SCREENS

3.2.2 To sign on to the system either enter the equipment ID (20 alphanumeric characters maximum), or press <Enter> to view a list of previously entered equipments. Use the arrow keys to move the highlight bar to the equipment desired. Select the equipment by pressing <Enter>. The Equipment Sign-On Screen is displayed as shown in Figure 3-2.

ADDING NEW EQUIPMENT

3.2.3 If the equipment desired is not on the list, select [NEW] and press <Enter>. The equipment Sign-On Screen is displayed as shown in Figure 3-2. Complete each field up to the number of characters indicated in Figure 3-2, and press <Enter> to proceed to the next field. After completion of the last field, press <Enter> and the Analyst Identification Screen appears.

```
ENTER EQUIPMENT END-ITEM I.D.:
     <RETURN> FOR EQUIPMENT LIST


                    SELECT EQUIPMENT
                    _____
                     [NEW]
                     AH-64
                     GRENADE
                     HELICOPTER
                     LASER
                     LAUNCHER

                    _____
```

Figure 3-1 Equipment Identification Screen

*EDIT
OPTION*

3.2.4 If the Equipment Sign-On Screen has been previously completed, an ACCEPT-EDIT command appears on the bottom of the screen. To change an entry use the arrow keys to highlight the EDIT option and press <Enter>. This places the cursor on the top line and enables the user to make corrections. Use the arrow keys to move the cursor to the line requiring correction. After completion of all corrections use the arrow keys to highlight the ACCEPT option of the ACCEPT-EDIT selection. Press <Enter> to proceed to the next screen.

3.3 ANALYST IDENTIFICATION SCREEN

*ANALYST
SCREENS*

3.3.1   After completion of the Equipment Identification Screen, two Analyst Sign-On Screens must be completed. The first screen requires you to enter your analyst ID as shown in Figure 3-3 (4 Alphanumeric characters maximum).

```
EQUIPMENT IDENTIFICATION.........:   20A
MILITARY NOMENCLATURE...........:    20A     INDENTURE LEVEL : 1N
COMMON NAME......................:   20A
NEXT HIGHER ASSEMBLY.............:    20A
NEXT HIGHER ASSEMBLY.............:    20A
NEXT HIGHER ASSEMBLY.............:    20A
PROGRAM MILESTONE................:    20A
DEVELOPMENT PHASE MILESTONE......:    20A
ACQUISITION MGMT MILESTONE.......:    20A
PROJECT MANAGER LAST NAME........:    15A     FIRST NAME: 15A
PROJECT MANAGER OFFICE SYMBOL....:    15A     PHONE #: 1(999)-999-9999
PROJECT MANAGER AUTOVON PHONE....:    999-9999
DISCREPANCY REPORTS TO...........:    20A
MANUFACTURER.....................:   20A
NATIONAL STOCK NUMBER............:    20N
```

Figure 3-2 Equipment Sign On Screen

NOTE

Underlined entries in the sample screens
indicate user input and character limits.
A=Alphanumeric; N=Numeric

3.3.2 Upon entering your Analyst ID, the Analyst
Sign-On Screen appears as shown in Figure 3-4. If
an analyst has signed on before, the software
recalls the stored information, and this screen
appears with the information previously entered.
For an ID recognized by the program, the Analyst
Sign-On Screen appears with a two choice menu
(ACCEPT or EDIT). Use the arrow keys to highlight
either the ACCEPT or EDIT choice. Press the <Enter>
key to select the desired choice. If the
information is correct, choose ACCEPT and the Main
Menu is displayed.

```
    ENTER ANALYST ID: 4A
```

Figure 3-3. Analyst Identification Screen

```
        ANALYST ID....................:4A
        ANALYST FIRST NAME...........:15A
        ANALYST LAST NAME............:15A
        COMMAND OFFICE SYMBOL........:15A
        COMMAND OFFICE PHONE.........: 1(999)-999-9999
        AUTOVON PHONE................:999-9999
```

Figure 3-4. Analyst Sign On Screen

*EDITING
EXISTING
INFORMA-
TION*

3.3.3 If the information is to be changed, select the EDIT option, the cursor moves to the first field where the user can make changes. Use the arrow keys to move the cursor to any of the fields requiring change. Move the cursor to the last field (AUTOVON PHONE) and press <Enter> to store the changes and access the Main Menu.

*ADDING
NEW
ANALYST*

3.3.4 The first time an analyst uses the software, the information on the Analyst Sign-On Screen must be completed. After completion of the last field, an ACCEPT-EDIT command appears on the bottom of the screen. Press <Enter> to accept the information.

3.4 MAIN MENU

3.4.1   The Main Menu is shown in Figure 3-5. It enables the user to select one of the options described below. Using the arrow keys; move the highlight bar to the desired option and press <Enter>. At the completion of any option, the program returns to the Main Menu and allows another selection to be made or the session to be terminated.

OPERATIONS	UTILITIES	INTRODUCTION	INSTRUCTIONS	EXIT

Figure 3-5. Main Menu

MAIN
MENU
OPTIONS

3.4.2 OPERATIONS. Selecting this option displays two choices: PERFORM ASSESSMENT and REPORT GENERATION. The first option allows the analyst to perform an ILS assessment on the equipment that was selected via the Equipment Identification Screen. The second is used to access the Report Generation Module. In this module, the analyst can generate management and technical reports that document the results of the assessment. A further description on performing an assessment is provided in Chapter 4 and report generation is discussed in Chapter 5.

3.4.3 UTILITIES. Two utility programs have been included in this option. The utilities are: REORGANIZE INDEX FILES and PACK DATABASES. These options allow the user to rebuild index files when they become corrupted. Files can become corrupted when the ILS program is ended abnormally. This occurs when the power is shut off without exiting normally (i.e., a power failure, or turning off the computer before exiting ILS). It can also occur when data is written to bad spots on disks (hard or floppy) and then cannot be read again.

3.4.3.1 In order to execute the utility programs, use the arrow keys to place the cursor on the UTILITIES option and press <Enter>. The two options REORGANIZE INDEX FILES and PACK DATABASES will be displayed.

NOTE

Corrupted files can be recognized by the user when bad or incorrect data is displayed. If the user suspects that any files are corrupted, both utility programs should be run to rebuild the indices. Once that is complete, the user may proceed.

RE-ORGANIZING INDEX FILES

3.4.3.2 To select REORGANIZE INDEX FILES option, use the down arrow key to highlight REORGANIZE INDEX FILES and press <Enter>. This displays a window on the Main Menu Screen entitled "REINDEXING ALL ILS SYSTEM WORK AREAS". As each database index file is rebuilt, the message within the box "Reindexing: Database (file name.DBF)" and the number of records being reindexed are shown. After all databases have been reindexed, a message line appears below the box stating "ILS System Successfully Reindexed, any <Key> to continue."

PACKING DATABASES

3.4.3.3 To select the PACK DATABASES option, use the down arrow key to highlight the selection and press <Enter>. This displays a window on the Main Menu screen entitled PACKING ALL ILS SYSTEM WORK AREAS. As each database file is packed, the message within the box reads "Packing: Database (filename.DBF)" and the number of records that are being packed. Upon completion of packing each file, a message line below the window appears stating "ILS System Successfully Packed, any <Key> to continue."

3.4.4 INTRODUCTION. This option displays a brief narrative about the computer-aided ILS Assessment System Software.

3.4.5 INSTRUCTIONS. This option displays suggestions on how to use the application software, and what to expect when operating the software. In addition, system navigation terminology is also displayed.

TERMI-
NATING
THE
SESSION

3.4.6 EXIT. This option displays a pull down menu with a YES and NO option. If the YES option is selected, a second menu is displayed to verify the choice to exit the session. If OK is selected, the program exits and returns to the DOS prompt C:\ILS. If NO is selected, you are returned to the Main Menu.

3.5 OPERATIONS

PERFORM
ASSESSMENT

3.5.1 From the Main Menu selection, begin the ILS assessment by selecting the PERFORM ASSESSMENT option under OPERATIONS. This option reveals a list of pertinent topics relating to the ILS Element as shown in Figure 3-6.

NOTE

The titles shown in the illustrative figures are provided to show the form t of the screen. The actual titles of the ILS ssessment in use may be different, but the software operation is the same.

ASSESSMENT
TOPICS

3.5.2 The Assessment Selection Screen shown in Figure 3-6, indicates the process number and abstract (title) of the assessment topic. This permits the user to choose topics that are pertinent for assessing a Weapon System in its current stage of development. Some topics are further divided into subtopics. Use the arrow keys to move the highlight bar to the desired topic and press <Enter> to select it.

3.5.3   Occasionally, and more often as the equipment assessment progresses, the reviewer will note an asterisk (*) on the left hand side of an assessment topic. The * indicates that a process summary has been entered for that topic. It is recommended that the process summary be updated when the reviewer completes most of the questions for the assessment topic.

```
                    [SELECT ASSESSMENT AREA]

PROCESS #:              ABSTRACT:
E1.1 - Review Design Status Assessments for Logistical Impacts
E1.2 - Review Program Management Documentation for Completeness
E1.3 - Review Design Status Assessments for Logistical Impacts.
E1.4 - Review Program Management Documentation for Completeness
```

Figure 3-6.   Assessment Selection

3.5.4   The user can create, review, or edit a process summary by pressing <F3>. The analyst can enter or revise the process summary on the narrative input screen shown in Figure 3-7. After completion of the summary, press <F10> to save. This saves the summary and allows the analyst to make two ratings that assess the Program Cost & Schedule Impact and Equipment Performance & Sustainability Impact.

```
                    [ENTER YOUR PROCESS SUMMARY]




                [<F10> TO SAVE, <ESC> TO EXIT]
```

Figure 3-7.   Process Summary Screen

QUESTION
LIST

3.5.5 When an assessment topic is selected, either a subprocess list appears as shown in Figure 3-8, or a question list is superimposed on the Assessment Selection Screen. The question list shown in Figure 3-9 displays a list of question numbers.

3.5.6 Displayed to the right of each question is its status; DONE, NOT DONE, or N/A(Not Applicable). The status for DONE or NOT DONE is automatically recorded by the software during any of the previous sessions. If the question was answered during any session, it is labeled DONE. It is labeled NOT DONE if it has never been worked on. A N/A (Not Applicable) is displayed when the analyst, during a previous session, determined that the question was not relevant to the equipment or life cycle phase. Refer to Chapter 4 for procedures on performing the assessment.

```
                    [SELECT ASSESSMENT AREA]

SUBPROCESS #:               ABSTRACT:
E1.1A1 - Review Tasks or Functions to Mission Requirements Driven
E1.1A2 - Review Maintenance Principles and Level of Repair
E1.1A3 - Review Personnel/Non-Personnel Resource Requirements
E1.1A4 - Review (B) MC use of B Level Army Maintenance Structure
E1.1A6 - Review Maintenance Task and Level of Repair Trade-Offs
```

Figure 3-8.   Subprocess Menu Selection

NOTE

In some ILS Assessment Elements, another level of subprocessess exists before the question list is displayed. The selection of topics in this sublevel is identical with the subprocess selection.

```
   QUESTION #:          ANSWERED
   E1.1-01              NOT DONE
   E1.1-02              DONE
   E1.1-03              DONE
   E1.1-04              N/A
     .
     .
     .
     .
   E1.1-17              NOT DONE
```

Figure 3-9. Question Menu

3.5.7 When the question list is displayed, the
<F4> key can be used to review the last answer to
the question that is highlighted. The information
that is displayed is the narrative text portion of
the assessment. Use the up and down arrow keys or
<Page Up> and <Page Down> keys to scroll through
the text. To return to the question list press
<ESC>. Either review the answer to another
question or select a question to answer.

3.6 HELP SYSTEM

3.6.1 The Help System is available to the analyst
throughout the operation of the software program.
When the analyst presses the <F1> key a help
screen is displayed giving information on the
particular operation being performed. Use the
arrow keys to navigate through the help screens.
If additional information is required, press the
<F1> again. This displays an ILS Help System Index
Selection Screen. Use the arrow keys to highlight
the desired selection and press <Enter> to review
the Help Screen. Press <ESC> to return to the
program.

3.7 NAVIGATION.

3.7.1 NAVIGATION MENU. The navigation menu
appears at the top of the screen when each
question is displayed. It enables the user to
answer the question displayed or go to another
question. The user accesses the navigation menu
by pressing the <ESC> key when the YES/NO/NA
choices are displayed beneath the question. The
navigation menu becomes activated on the upper
portion of the screen as shown in Figure 3-10.
This menu gives the user the options defined in
Table 3-1.

```
                    [NAVIGATION MENU]

  ASSESSMENT    FIRST    LAST    NEXT    PREVIOUS    SEARCH    EDIT    EXIT
```

Figure 3-10.   Navigation Menu

Table 3-1. Navigation Menu Option Descriptions

NAVIGATION
KEYS

SELECTION	FUNCTION
ASSESSMENT	Makes question appearing on the screen active, enabling the analyst to answer it.
FIRST	Displays the first question in the assessment.
LAST	Displays the last question in the assessment.
NEXT	Displays the question after the currently selected question. This option is used to skip a question.
PREVIOUS	Displays the question before the currently selected question. This option is used for answering a question that was skipped or to modify the last answer.
SEARCH	Allows the user to either select a specific question by entering the question number, or searching for a question in another topic. The user selects the topic, a subtopic (if available) and then the specific question desired. This option quickly moves you from one part of the question list to another.
EDIT	Allows the user to edit questions previously answered during this session. The user is returned to the question from which edit was invoked. This option may be used if the analyst wants to review the details of a previously answered question without exiting the software.
EXIT	Allows the user to return to the Main Menu.

CHAPTER 4

ASSESSMENT TECHNIQUES AND PROCEDURES

4.1 INTRODUCTION

4.1.1 This chapter provides the user with the procedures required to perform an ILS assessment. It includes procedures on reviewing previous entries, manipulating of the program and generating assessment results.

4.2 HISTORICAL RESULTS

HISTORICAL RECORDS

4.2.1 The ILS Assessment software is designed to generate a historical record of events over the life cycle of a weapon system. The historical record is developed one session at a time.

CURRENT SESSION

4.2.2 A session begins when an analyst signs on by selecting a weapon system to assess, and ends when he elects to exit. During that current session, all answers to questions are recorded and saved by the software. Changes can be made only to questions answered during a current session. Questions previously answered, may be answered again without affecting data already in the system. Once the analyst exits a current session, no additional changes can be made.

AUDIT TRAIL

4.2.3 As additional sessions are held, the saved records become an audit trail of events that have occurred over the life of the weapon system. This information is used when generating the reports described in Chapter 5.

4.3 MULTIPLE ANALYST USAGE

DIFFERENT
USERS

4.3.1   The ILS Assessment software can be used by multiple analysts (one at a time) on one computer. These analysts can assess the same or different aspects of selected equipment. Each analyst can assess the same or a different piece of equipment.

TAGGING
RESULTS

4.3.2 Each time a new user enters the program, he completes the Analyst Identification and Sign-on Screens as described in Chapter 3. The program stores the information for each user in a separate record. Every question answered by the analyst during an assessment is tagged with the analyst identification, equipment identification, date, and time the session started.

4.4 PERFORMING AN ASSESSMENT

MAIN
MENU

4.4.1 The ILS Assessment Program is entered from the Main Menu. Refer to Chapter 3 for procedures on completing the preliminary screens necessary to reach the Main Menu. From the Main Menu, select the PERFORM ASSESSMENT option under OPERATIONS. This brings up the assessment program.

STARTING
ASSESSMENT

4.4.2 Upon selecting the PERFORM ASSESSMENT option from the MAIN MENU, a list of assessment topics is displayed. Each topic has a series of questions which must be answered to perform the assessment. Refer to Appendix B for a complete list of these questions. To select an assessment topic, use the arrow keys to move the highlight bar to the topic desired and press <Enter>. For a further discussion of selecting an assessment topic, see Chapter 3, paragraph 3.5.1 PERFORM ASSESSMENT.

4.5 ANSWERING QUESTIONS

QUESTION SELECTION

4.5.1 After selecting a topic, and a subtopic (if required), the related question list is superimposed on the Assessment Selection Screen. To answer a question, use the arrow keys to move the highlight bar to the desired question number and press <Enter>.

NOTE

The assessment of an answered question can only be changed if it was answered during the current session.

4.5.2 The Question Screen is displayed. The Navigation Menu (see Figure 3-9) appears at the top of the Question Screen, and becomes active (e.g., the program is in a "wait state" while the user makes a selection). The default selection is ASSESSMENT.

4.5.3 To begin answering a question, use the arrow keys to highlight and select the ASSESSMENT option. There are two types of questions that may appear during an assessment. The first type requires either a YES, NO or N/A answer, while the second type requires an explanation.

QUESTION RESPONSE

4.5.4 After reading the question, you can choose to answer it or activate the Navigation Menu by pressing <ESC>. For YES/NO/NA questions, the responses appear below the question and for explanation questions, a box containing a message is displayed.

4.5.5 To answer the first type of question, use the arrow keys to highlight YES, NO, or N/A and press <Enter> to select. Refer to figure 4-1 for an example of how a question screen is displayed.

NOTE

During the assessment procedure, the <F2> function key is used to toggle between the question and the assessment screens.   After toggling back to the question, a series of subquestions that discuss additional points are displayed beneath the main question. The <F10> function key is used to save the assessment, and the <ESC> key is used to abort the assessment and proceed to the next question.

```
QUESTION NUMBER:    E1.1-04

     QUESTION:      Have the estimated fielded
                    quantities been identified
                    and relayed to the
                    logistician? (Equipment
                    densities have an effect
                    on support methodologies).
```

Figure 4-1. Sample Question Screen

4.5.6 Questions of the second type require an explanation instead of a YES, NO, or N/A response. The question types are predetermined and cannot be changed by the user.

4.6 QUESTIONS WITH "EXPLANATION" ANSWERS

EXPLANA-
TION
RESPONSE

4.6.1 When an explanation question is selected, a box with the following instructions is displayed at the bottom of a text question screen shown in Figure 4-2.

"<Enter> to proceed, any <Key> next
   question, <F3> to mark Not Applicable."

4.6.2 ENTERING AN ASSESSMENT. To proceed with your explanation, press <Enter>. The software displays the assessment screen (see Figure 4-3).

4.6.3 NEXT QUESTION. If you decide not to answer the question at this time, press any <Key> other than <Enter> or <F3>. This question is skipped and the software automatically moves to the next question without recording your answer.

QUESTION NUMBER:E1.1-02
QUESTION: How are system designers, maintenance engineers and other logistical element managers communicating on the design and support planning effort?

POINTS TO CONSIDER: Explain mechanism for exchanging information.

Figure 4-2. Text Question Screen

4.6.4 NOT APPLICABLE. If this question is not applicable to the equipment or life cycle phase press <F3>. The software records your ans_er and automatically moves to the next question.

4.7 QUESTIONS WITH "YES" ANSWERS

YES
RESPONSE

4.7.1 If the response is YES, an assessment screen is displayed (Figure 4-3) for you to enter an assessment (e.g., narrative text answering the question). The assessment screen provides you with a word processing capability. On this screen you may type up to 14 pages of information concerning each question. Your assessment may consist of the work planned or accomplished in the project that deals with the main issue of the question, or actions required to comply with the intent of the question. If you would like to see the question while entering the assessment, press <F2>. After typing in the narrative text of your assessment, the results must be saved by pressing the <F10> key.

```
                   ENTER YOUR ASSESSMENT




 ALERT DATE:  /  /   ACTION DATE:  /  /
```

Figure 4-3.   Example of the Assessment Screen

ALERT/
ACTION
DATE

4.7.2 After completing the assessment and pressing <F10>, the ALERT DATE and ACTION DATE fields are activated. The ALERT DATE field allows the analyst to record a follow-up date to check on specific actions which should be occurring to resolve a problem. The software only accepts the Alert Date if it is greater than or equal to the session date.

4.7.3 The ACTION DATE field permits the analyst to indicate when specific actions must be completed. Action Dates must be greater than or equal to Alert Dates or they will not be accepted by the software. If these dates were completed for the same question during a previous session, the dates appear in the fields provided. To complete or edit the dates, proceed as follows:

a. Complete these fields using the DD/MM/YYYY format. For a single digit, enter a blank space or zero to the left of the digit. The program accepts only actual dates. If an incorrect date is entered, the computer beeps and returns to the first character in the field.

b. Once both fields are completed, a verification message is displayed. If the dates are correct, press <Enter>. If not, type "N" and press <Enter>. The cursor then returns to the ALERT DATE field for editing.

c. There is no requirement to complete these fields. To skip either or both of these fields, press <Enter> once or twice. <Enter> can also be used to accept a field that was previously completed. The verification message is displayed. Press <Enter> to select "Y".

4.8 QUESTIONS WITH "NO" ANSWERS

NO RESPONSE

4.8.1   If the response to the question is NO, a sequence of screens follows. The first is a Cost and Scheduling Impact Screen which is displayed beneath the question as shown in Figure 4-4. This screen gives you the ability to rate the impact on the Weapon System program by selecting CRITICAL, INTERMEDIATE, or ROUTINE.

SELECT THE RATING FOR THE COST AND SCHEDULE IMPLICATION

CRITICAL   INTERMEDIATE   ROUTINE

Figure 4-4. Cost and Schedule Rating Screen

SELECT OPTIONS

4.8.2 The user must select one of these options which indicates the time frame for resolving issues that may cause a program schedule slip or cost increase. The CRITICAL option indicates immediate resolution; the INTERMEDIATE option indicates resolution within 30 days; and the ROUTINE option indicates resolution within cost and schedule constraints.

MILESTONE ASSESSMENT

4.8.3 After selecting one of the options, the Milestone Assessment Screen is displayed (Figure 4-5). On this screen, briefly explain what part of the schedule has been impacted or identify the significant cost driver. To save this information, press <F10>. Following completion of the Milestone Schedule Assessment Screen, the user is asked to rate the Performance and Sustainability Implications.

PERF. & SUST.

4.8.4 The Performance and Sustainability Rating Screen is shown in Figure 4-6. The rating options are again CRITICAL, INTERMEDIATE, or ROUTINE. After making the appropriate selection, a Milestone Performance Assessment Screen is displayed. The user enters a brief explanation of how system performance and sustainability is impacted by the issues addressed in the question. To save the information, press <F10>.

```
QUESTION NUMBER: E1.1-03
QUESTION:  Have  logistical  design  parameters  been
incorporated into design analytical efforts?



---------------[MILESTONE SCHEDULE IMPACT: ]-------------
```

Figure 4-5. Milestone Assessment Screen

```
        RATE THE PERFORMANCE AND SUSTAINABILITY IMPACT

          CRITICAL           INTERMEDIATE      ROUTINE
```

Figure 4-6. Performance and Sustainability Rating Screen

ASSESSMENT RESULTS

4.8.5 The next screen displayed is the Enter Assessment Results Screen. The user enters the assessments results stating why the question was answered "NO". If appropriate, the user should enter a list of actions that must be accomplished to correct any deficiency along with a schedule. Press <F10> to save the information and activate the ALERT DATE and ACTION DATE fields prior to answering the next question. Complete the ALERT DATE fields as indicated in paragraph 4.7.2.

4.9 QUESTIONS WITH "N/A" ANSWERS

MARKING A QUESTION N/A

4.9.1 The user may determine during the course of the assessment that a question is not applicable. A question is not applicable when it is deemed not relevant to the equipment under analysis or does not pertain to the current life cycle phase. To make a question not applicable, use the arrow keys

to highlight the N/A choice and press <Enter> to select it.. The software records the response and automatically moves to the next question.

CHANGING THE N/A

4.9.2   If a question was marked not applicable during a previous session (by any analyst assessing the equipment), a message to that effect is displayed, when the question is selected again. If the user determines that the question is now relevant, the N/A response may be changed. Use the <F3> key to return the question to its original state so it can be answered following the procedures described in paragraph 4.5.2

4.10 FUNCTION KEYS

NAVIGATION KEYS

4.10.1 The function keys are used as an aid to the user. If you would like to go to another question, instead of answering the present question, press <ESC>. This displays the navigation menu.

4.10.2 Use the arrow keys to highlight one of the other options of the Navigation Menu. These options are ASSESSMENT, FIRST, LAST, NEXT, PREVIOUS, SEARCH, EDIT, and EXIT. For a description of these selections, refer to Chapter 3, Table 3-1.   To return to the Main Menu from the Navigation Menu, the user may press the <ESC> key or highlight and select the EXIT option.

<F10> KEY

4.10.3 <F10> KEY. The <F10> key is available on the Assessment Screen and the two milestone screens. It is used to save the narrative text after the user has finished typing a response.

<ESC> KEY

4.10.4 <ESC> KEY. The <ESC> key has several functions. If you press the <ESC> key prior to selecting a response (i.e. YES/NO/NA) to a question, the Navigation Menu becomes active and the arrow keys can be used to make a selection.

4.10.5 Pressing the <ESC> key from the Navigation Menu, returns you to the Main Menu. If you press <ESC> from the Main Menu, you exit the program.

4.10.6 Pressing the <ESC> key while filling out the assessment screen aborts the answer and displays the next question. Any narrative that is written is not saved.

HELP KEY

4.10.7 <F1> Key. The <F1> key is the help key. Pressing this key displays information to assist the user on using the software, explaining Menu choices or inputting data for a specific screen, and defining the topics on the Assessment Selection Screen. The help key also displays a help menu. This menu allows the user to get context sensitive help for the listed topics.

4.10.8 WORD PROCESSING FUNCTION KEYS. The keys shown in table 4-1, are used when entering text into the program.

Table 4-1. Word Processing Function Keys

WORD PROCESSING KEYS

KEY	FUNCTION
<Insert>	Used to insert a letter, word or phrase between existing words at the location of the cursor.
<Delete>	Used to delete a single letter located under the cursor.
<Backspace>	Used to backspace and erase the previous letter.
<Caps Lock>	Used to enter all upper case letters.
<Enter>	Used to create a hard return to move the cursor to the next line.
<Tab>	Used to indent text line 5 spaces.

CHAPTER 5
REPORT GENERATION

5.1 INTRODUCTION

5.1.1 This chapter provides the user with the information required to generate reports for the ILS assessment performed. All reports can be output to the screen, printer or file.

5.2 SELECTING A REPORT

5.2.1 The user enters the report generator program from the OPERATIONS option on the Main Menu. After selecting the OPERATIONS option, the user selects the REPORT GENERATOR option. A Reports Welcome Screen is displayed, followed by the Reports Generator Main Menu. The user must press <Enter> on the Report Generation Screen to reach the Main Menu.

REPORT CHOICES

5.2.2 The Main Menu has seven report selections and one exit selection. Reports 1 and 2 are executed directly off this menu, while reports 3 through 7 have several submenu options. To select a report, move the highlight bar to the desired choice and press <Enter>. Either a message indicating the report is processing or a window containing a submenu of reports will be displayed. The report options are shown in Figure 5-1 and described in the following paragraphs.

5.2.3 SYSTEM/EQUIPMENT DATA. This option generates a report containing the system/equipment data for this session to the output device selected.

5.2.4 OVERALL ASSESSMENT RESULTS. This option generates a report containing the overall assessment results for the selected equipment to the output device selected.

```
SYSTEM/EQUIPMENT DATA
OVERALL ASSESSMENT RESULTS
ASSESSMENT STATUS
ASSESSMENT RESULTS
COST AND SCHEDULE IMPACTS
PERFORMANCE AND SUSTAINABILITY IMPACTS
ALERT AND ACTION SCHEDULE DATES
EXIT TO MAIN ILS MENU
```

Figure 5-1. Report Generator Main Menu

5.2.5 ASSESSMENT STATUS. This option displays a submenu which allows the user to generate either a WEAPONS SYSTEM CURRENT STATUS REPORT or a CURRENT REVIEW SESSION REPORT. The report is directed to the selected output device.

5.2.6 ASSESSMENT RESULTS. This option displays a submenu which allows the user to select an ASSESSMENT HISTORY REPORT, WEAPONS SYSTEM CURRENT STATUS REPORT or a CURRENT REVIEW SESSION REPORT. The generated report is then directed to the output device selected.

5.2.7 COST AND SCHEDULE IMPACTS. This option displays a submenu which allows the user to select a WEAPONS SYSTEM CURRENT STATUS REPORT, CURRENT REVIEW SESSION REPORT, CRITICALITY ANALYSIS REPORT or a WEAPONS SYSTEM SUMMARY REPORT. The generated report is then directed to the output device selected.

5.2.8 PERFORMANCE AND SUSTAINABILITY IMPACTS. This option displays a submenu which allows the user to select a WEAPONS SYSTEM CURRENT STATUS REPORT, CURRENT REVIEW SESSION REPORT, CRITICALITY ANALYSIS REPORT or a WEAPONS SYSTEM SUMMARY REPORT. The generated report is then directed to the output device selected.

5.2.9 ALERT AND ACTION SCHEDULE DATES. This option displays a submenu which allows the user to select an ALERT DATE ITEMS REPORT or an ACTION DATE ITEMS REPORT. The generated report is then directed to the output device selected.

5.2.10 EXIT TO MAIN ILS MENU. This option terminates the report generator program and returns the user back to the ILS Main Menu.

5.3 CHANGING REPORT DESTINATION

5.3.1 The ILS Assessment software allows the User to output reports to the screen, printer, or file. The mechanism to control the output, device is located on the last line of the Report Menu Screen. Pressing the <F2> key toggles between the three options.

SCREEN OUTPUT

5.3.2 SCREEN OUTPUT. The default device for Report Output is the Screen or Video Display. After the report module loads, the output device is set to screen. After selecting the output device, select any report from the menu and the software generates it. After several minutes the report is displayed to the screen in a format that is analogous to one of the figures presented in Chapter 5. To scroll through the report use the up & down arrow, page up, page down, home, and end keys. Once you have finished reviewing the report, use <ESC> to exit and return to the Report Menu.

PRINTER OUTPUT

5.3.3 PRINTER OUTPUT. Press the <F2> key once to change the output device to printer. Make sure that your printer is on-line. Select the report from the Report Menu. After several minutes your report will begin to print out. Depending on the amount of data in the report, it may take a long period of time for the complete report to print out. At the conclusion of the report, a message indicating the report has finished will be displayed.

FILE
OUTPUT

5.3.4 FILE OUTPUT. To change the output device to file, press <F2> twice from the Screen Device option or once from the Printer Device option. When this option is chosen, the file name must be entered. The file name must be eight characters or less. Type the name of the file and press <ENTER>. An .RPT file extension is automatically appended to the name of the file. Choose the Report you wish to generate from the Report Menu and after several minutes a message is displayed indicating the report is complete.

NOTE

Caution should be used when naming reports, since a newly created report file can overwrite an existing report file with the same name.

REPORT
FILES

5.3.5 REPORT FILES. The files created from the File Output option are stored in the directory containing the ILS Program. The file is an ASCII text file devoid of any special control characters. The page layout of the information contained in the file is formatted exactly like the printed output. This file maybe imported into a word processor in order to print out only pertinent parts of the report or redirected to a printer at a later date. For instructions on printing a text file from DOS, consult your DOS manual.

SYSTEM/
EQUIPMENT
DATA
REPORT

5.4 SYSTEM/EQUIPMENT DATA REPORT

5.4.1 This report provides information on the system/equipment being assessed (the system/equipment selected on the Equipment Sign-On Screen). Information related to the life cycle phase, project manager and reviewer is included. Refer to Figure 5-2 for an example of this report.

5.5 OVERALL ASSESSMENT RESULTS REPORT

OVERALL ASSESSMENT RESULTS REPORT

5.5.1 This report contains the narrative text, Cost and Schedule (C/S), and the Performance and Sustainability (P/S) ratings input for each review topic. The C/S and P/S ratings are CRITICAL, INTERMEDIATE, and ROUTINE. The report is sorted by process number and contains the last assessment for each topic. The topic title and the date of the last assessment are also included. Refer to Figure 5-3 for an example of this report.

5.6 ASSESSMENT STATUS REPORT

ASSESSMENT STATUS REPORT

5.6.1 This report has two options: WEAPON SYSTEM CURRENT STATUS and CURRENT REVIEW SESSION REPORT.

5.6.2 These reports contain seven columns. The columns are labeled: Question, Answer, Review Date, Reviewer Initials, C/S Rating, P/S Rating and Action Date. For the questions answered YES, N/A, or Text, the C/S and P/S ratings will not appear. The Action Date may or may not be completed. Any question not answered will have blank columns to the right of the question number.

5.6.3 CURRENT WEAPON SYSTEM STATUS. This report is used to determine the assessment status of the selected System/Equipment. It lists all questions and shows which are answered. A summary is included at the end of the report which indicates the number of questions answered YES/NO/NA/TEXT, and NOT ANSWERED. Following this is a Criticality Summary for the C/S and P/S showing the total number of questions rated as Critical, Intermediate, or Routine. Refer to Figure 5-4 for an example of this report.

5.6.4 CURRENT REVIEW SESSION. This report has the same format as the CURRENT WEAPONS SYSTEM STATUS REPORT. However, it contains only those questions answered during the current session. Refer to Figure 5-5 for an example of this report.

5.7 ASSESSMENT RESULTS REPORT

5.7.1 This report has three options: ASSESSMENT HISTORY REPORT; WEAPON SYSTEM CURRENT STATUS REPORT; and CURRENT REVIEW SESSION REPORT. All versions of this report are generated in question number order, but list only those questions that have been answered. In addition, each topic (e.g., process) begins on a new page.

5.7.2 All reports start with the question number and question. This is followed by any related subquestion (if applicable). The answer (i.e., YES/NO/NA/TEXT), session date, and reviewer's name follow the question. If a YES response was made, the assessment (narrative text) will follow.

5.7.3 If a NO response was entered, the Cost and Schedule Rating and short explanation of the rating will follow. Next, the Performance and Sustainability rating with its short explanation will appear. The last item is the assessment results (narrative text) which may include any actions.

5.7.4 HISTORICAL REPORT. The historical report prints each question and subquestion once. This is followed by all the answers to the question in descending date order (latest to earliest). The answers to a question are separated by a line, and the questions are separated by a gray band. Refer to Figure 5-6 for an example of this report.

5.7.5 CURRENT WEAPON SYSTEM STATUS. This report has the same format as the historical report. However, it contains only one answer to every question. The last answer entered, regardless of the analyst who entered it, is included. Refer to Figure 5-7 for an example of this report.

5.7.6 CURRENT REVIEW SESSION. This report has the same format as the historical report. However, it contains only the answers input by the analyst performing the assessment during the current session. Refer to Figure 5-8 for an example of this report.

5.8 COST AND SCHEDULE IMPACTS REPORTS

COST AND SCHEDULE IMPACTS REPORT

5.8.1 This report has four options: Current Weapon System Status; Current Review Session; Criticality Analysis; and Weapon System Summary.

5.8.2 CURRENT WEAPON SYSTEM STATUS REPORT. This report is sorted by rating. All CRITICAL issues are grouped together followed by INTERMEDIATE and ROUTINE issues. Within each rating group, the questions are broken down by topic where the first question for each topic starts on a new page.

5.8.3 This report is formatted so that question number, question, subquestion (if applicable) appear first. This is followed by the Cost and Schedule Impact (short narrative), and a detailed action field. Refer to Figure 5-9 for an example of this report.

5.8.4 CURRENT REVIEW SESSION. This report has the same format as the Current Weapon System Status Report. However, this report contains only the answers input by the analyst during the current session. Refer to Figure 5-10 for an example of this report.

5.8.5 CRITICALITY ANALYSIS REPORT. This report provides a summary of problem areas for the equipment being assessed. The report is grouped by rating (CRITICAL, INTERMEDIATE, or ROUTINE). It contains all questions whose last answer was NO. Within each grouping, the topics are sorted by topic number and within each topic, the questions are sorted by question number. For each question, the alert and action dates are listed. At the conclusion of each group, the total number of questions within each rating group is provided. At the end of the report, the total number of questions (e.g. TOTAL ACTIONS) counted in the report is provided. Refer to Figure 5-11 for an example of this report.

5.8.6 **WEAPON SYSTEM SUMMARY REPORT**. This report compares, by topic, the number of questions rated CRITICAL, INTERMEDIATE, and ROUTINE to the number answered satisfactorily and also includes those remaining to be answered.

5.8.7 This report contains seven columns labeled: Process #; Title; Critical; Intermediate; Routine; Satisfactory; and To Do. It is sorted by process number and reflects only the last answer to each question. All topics are included, even if no questions were answered. The report is intended to identify those topics where a large number of problems exist, and therefore require additional effort. Refer to Figure 5-12 for an example of this report.

5.9 PERFORMANCE AND SUSTAINABILITY IMPACT REPORTS

PERFORM-
ANCE &
SUSTAIN-
ABILITY

5.9.1 This report has four options: Current Weapon System Status; Current Review Session; Criticality Analysis; and Weapon System Summary.

5.9.2 CURRENT WEAPON SYSTEM STATUS REPORT. This report is sorted by rating. All CRITICAL issues are grouped together followed by INTERMEDIATE and ROUTINE issues. Within each rating group, the questions are broken down by topic where the first question for each topic starts on a new page. Refer to Figure 5-13 for an example of this report.

5.9.3 This report is formatted so that question number, question and subquestion (if applicable) appear first. This is followed by the Cost and Schedule Impact (short narrative), and a detailed action field.

5.9.4 CURRENT REVIEW SESSION. This report has the same format as the Current Weapon System Status Report. However, it contains only the answered questions entered by the analyst during the current session. Refer to Figure 5-14 for an example of this report.

5.9.5 CRITICALITY ANALYSIS REPORT. This report provides a summary of problem areas for the equipment being assessed. The report is grouped by rating (CRITICAL, INTERMEDIATE, or ROUTINE). It contains all questions whose last answer was NO. Within each grouping, the topics are sorted by topic number and within each topic, the questions are sorted by question number. For each question, the alert and action dates are listed. At the conclusion of each group, the total number of questions within each rating group is provided. At the end of the report, the total number of questions (e.g. TOTAL ACTIONS) counted in this report is provided. Refer to Figure 5-15 for an example of this report.

5.9.6 WEAPON SYSTEM SUMMARY REPORT. This report compares, by topic, the number of questions rated CRITICAL, INTERMEDIATE, and ROUTINE to the number answered satisfactorily and also includes those still remaining to be answered.

5.9.7 This report contains seven columns labeled: Process #; Title; Critical; Intermediate; Routine; Satisfactory; and To Do. It is sorted by process number and reflects only the last answer to each question. All topics are included, even if no questions were answered. The report is intended to identify those topics where a large number of problems exist, and therefore require additional effort. Refer to Figure 5-16 for an example of this report.

5.10 ALERT AND ACTION SCHEDULE DATES REPORTS

ALERT AND ACTION SCHEDULE DATES REPORTS

5.10.1 This report has two options: Alert Date List of Problem Areas; and Action Date List of Problem Areas. The Alert Date List contains a set of follow-up dates related to specific questions, while the Action Date List contains a set of completion dates related to specific actions associated with a question. Each report is a Weapon System Current Status type, but contains only those questions where dates were entered. The questions are sorted by ALERT or ACTION date.

5.10.2 ALERT DATE ITEMS LIST. This report contains all questions where the ALERT DATE has been completed. It is sorted by ALERT DATE from the oldest to the newest. There are six columns in the report that are labeled: Question, Answer. C/S Rating, P/S Rating, Alert Date, and Days Left. The report contains YES/NO/TEXT answers. For YES and TEXT answers, the ratings are blank. The Days Left column indicates the number of days remaining from the Report Date before a follow-up is required. A negative number in this column indicates that the follow-up date has passed. Refer to Figure 5-17 for an example of this report.

5.10.3 ACTION DATE ITEMS LIST. This report contains all questions where the ACTION DATE has been completed. It is sorted by ACTION DATE from the oldest to the newest. There are six columns in the report that are labeled: Question, Answer, C/S Rating, P/S Rating, Alert Date, and Days Left. The report contains YES/NO/TEXT answers. For YES and TEXT answers, the ratings are blank. The Days Left column indicates the number of days remaining from the Report Date before all actions associated with the question must be completed. A negative number in this column indicates that the actions have not been completed. Refer to Figure 5-18 for an example of this report.

PAGE #: 1   10/12/90

ASSESSMENT OF ILS MAINTENANCE PLANNING
REVIEW MANAGEMENT REPORT

EQUIPMENT IDENTIFICATION:
SYSTEM: XX XX XXXXXX SUBSYSTEM: Not Subsystem
MILESTONE IDENTIFICATION:
LOCAL ILS: XXX AMC PAM 70-20:   XXX DA PAM 700-26:   X
PROJECT MANAGER POINT OF CONTACT:
COMMAND/OFFICE: XXXXXXXX CONTACT NAME: XXX X., XXXX CONTACT PHONE: 1(XXX)-XXX-XXXX
REVIEWER REFERENCES:
COMMAND/OFFICE: XXXX REVIEWER NAME: XXXXX, XXXXXX PHONE: 1(XXX)-XXX-XXXX REVIEW DATE: XX/XX/XX AUTOVON PHONE:
SEND REPORT TO: XXXX XXXXXX NOTES:

Figure 5-2. System/Equipment Data Report

OVERALL ASSESSMENT RESULTS
WEAPON SYSTEM CURRENT STATUS

ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

Page #1   REPORT DATE: XX/XX/XX

| E1.1 | Review Design for Logistical Impacts | Review Date XX/XX/XX | C/S INTERMED | P/S ROUTINE |

Summary

| E1.3A1 | Review Tasks or Functions to Mission Requirements | Review Date XX/XX/XX | C/S CRITICAL | P/S CRITICAL |

Summary

| E1.4A1 | Review (P)MAC for Accuracy & Completeness | Review Date XX/XX/XX | C/S | P/S |

Summary

| E1.5A1 | Assess Reliability Centered Maintenance (RCM) Results | Review Date | C/S | P/S |

Summary

Figure 5-3. Overall Assessment Results Report

WEAPON SYSTEM CURRENT ILS STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: 1   REPORT DATE: XX/XX/XX

QUESTION	ANSWER	REVIEW DATE	INIT	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE
E1.1	Review Design for Logistical Impacts					
E1.1-01						
E1.1-02						
E1.1-03	NO	XX/XX/XX	AA	INTERMED	INTERMED	XX/XX/XX
E1.1-04						
E1.1-05	TEXT	XX/XX/XX	BB	---	---	/ /
E1.1-06						
E1.1-07						
E1.1-08						
E1.1-09						
E1.1-10						
E1.1-11						
E1.1-12						
E1.2	Review Program Management Documentation for Completeness					
E1.2-01						
E1.2-02						
E1.2-03	YES	XX/XX/XX	AA	---	---	/ /
E1.2-04						
E1.2-05	TEXT	XX/XX/XX	BB	---	---	/ /
E1.2-06	NO	XX/XX/XX	CC	ROUTINE	ROUTINE	XX/XX/XX
E1.2-07						
E1.2-08						
E1.2-09						
E1.2-10						
E1.2-11						
E1.2-12						
E1.3A1	Review Tasks or Functions to Mission Requirements					
E1.3A-01						
E1.3A-02						
E1.3A-03						
E1.3A-04						
E1.3A-05						

Figure 5-4. Assessment Status Report (Weapon System
Current Status) Sheet 1 of 2

WEAPON SYSTEM CURRENT ILS STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

| EQUIPMENT ID: XXXXXX | MILESTONE: XXX |

PAGE #: XX   REPORT DATE: XX/XX/XX

REVIEW STATUS SUMMARY

YES	10
NO	8
N/A	4
TEXT	2
UNANSWERED	198
TOTAL	222

CRITICALITY SUMMARY

	CRITICAL	INTERMEDIATE	ROUTINE
Cost and Schedule	4	3	1
Performance and Sustainability	3	3	2
Total	7	6	3

Figure 5-4. Assessment Status Report (Weapon System
Current Status) Sheet 2 of 2

CURRENT REVIEW SESSION REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XX XX XXXXX   REVIEWER: X. XXXXXX
  REVIEW DATE: XX/XX/XX   OFFICE SYMBOL: XXXXX
    MILESTONE: XXX

PAGE #: 1   XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE
E1.6A3	Review Depot Support Plans			
E1.6A3-01	YES	---	---	/ /
E1.6A3-02	YES	---	---	XX/XX/XX
E1.6A3-03	N/A	---	---	---
E1.6A4	Review ISSA, HNS, CLS, ICLS Implementation Plans			
E1.6A4-01	N/A	---	---	---
E1.6A4-02	N/A	---	---	---
E1.6A6	Review Warranty Implementation Plans			
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX
E1.6A7	Review SDC Plans and Execution			
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX
E1.7A1	Review Sub-Assessments for Overall Consistency			
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX
E1.7A4	Identify Actions Requiring Further Analysis for Resolution			
E1.7A4-01	YES	---	---	XX/XX/XX

Figure 5-5. Assessment Status Report (Current Review
Session Report)

HISTORICAL ASSESSMENT RESULTS
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX	MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

  PROCESS E1.1   Review Design for Logistical Impacts

-------------------- QUESTION---------------------------
QUESTION #: E1.1-01
Do design specifications establish logistical requirements (i.e.,
maintainability, reliability) to meet system readiness objectives
and the operational scenarios?

ANSWER: YES   SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

-------------------ASSESSMENT--------------------------

ANSWER: NO   SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

COST & SCHEDULE RATING: ROUTINE
COST & SCHEDULE IMPACT:

PERFORMANCE & SUSTAINABILITY RATING: ROUTINE
PERFORMANCE AND SUSTAINABILITY IMPACT:

-------------------------ACTION--------------------------------

Figure 5-6.   Assessment Results Report (Assessment
              History)

ASSESSMENT RESULTS
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

PROCESS E1.1   Review Design for Logistical Impacts

---------------------- QUESTION----------------------------
QUESTION #: E1.1-02
How are system designers, maintenance engineers, and other
logistical element managers communicating on the design and
support planning effort?

-----------------------SUBQUESTION-------------------------
o Explain mechanism for exchanging information.

ANSWER: TEXT SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

-----------------------ASSESSMENT--------------------------

Figure 5-7. Assessment Results Report (Weapons System
            Current Status)

ASSESSMENT RESULTS
CURRENT REVIEW SESSION
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

PROCESS E1.1   Review Design for Logistical Impacts

---------------------- QUESTION---------------------------
QUESTION #: E1.1-02
How are system designers, maintenance engineers, and other
logistical element managers communicating on the design and
support planning effort?

ANSWER: TEXT   SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

---------------------ASSESSMENT-----------------------------

Figure 5-8. Assessment Results Report (Current Review
Session)

COST AND SCHEDULE IMPACT REPORT
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
-------------------- QUESTION--------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

-------------------SUBQUESTION-------------------
-Identify functional groups that have placed at incorrect
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
    (A three line text field that includes a short
explanation of the cost and/or schedule impact.)

----------------------------ACTION--------------------------

Figure 5-9. Cost and Schedule Impacts Report (Weapons
            System Current Status)

COST AND SCHEDULE IMPACT REPORT
CURRENT REVIEW SESSION
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

PROCESS # :E1.4A03   Review Compatibility of (P)MAC
QUESTION #: E1.4A1-02   with (B)MC
------------------- QUESTION-----------------------
Have adequate and accurate task times been input into the
(P)MAC?

---------------------SUBQUESTION--------------------
-Specify whether the results of testing and demonstrations
contradict these values. -Identify the reason the times in
(P)MAC and the actual times are different (e.g., training,
publications etc.)

COST AND SCHEDULE IMPACT
81 MM Mortar   Question E1.4A03-03
XX/XX/XX   C&S Rating: Critical
Session #X Analyst: XXX XXXX

--------------------------ACTION-----------------------

Figure 5-10. Cost and Schedule Impacts Report (Current
            Review Session Report)

COST AND SCHEDULE IMPACT REPORT
CRITICALITY ANALYSIS REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

```
EQUIPMENT ID:  XXXXXX          ILS MILESTONE:  XXX
LAST SESSION DATE: XX/XX/XX    REVIEWER: X. XXXXX
```

Page #: 1   Report Date: XX/XX/XX

```
------------------------CRITICAL-----------------------------
E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1.02         ALERT DATE:              ACTION DATE:

E1.6A6           Review Warranty Implementation Plans
  E1.6A6-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

E1.7A1           Review Sub-Assessments for Overall Consistency
  E1.7A1-02         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

                              TOTAL CRITICAL ACTIONS:    3

---------------------INTERMEDIATE----------------------------
E1.1             Review Design for Logistical Impacts.
  E1.1-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX

E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1-03         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

E1.6A7           Review SDC Plans and Execution.
  E1.6A7-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

                         TOTAL INTERMEDIATE ACTIONS:    3

----------------------ROUTINE--------------------------------
E1.2             Review Program Management Documentation for
                 Completeness
  E1.2-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX

                              TOTAL ROUTINE ACTIONS:    3
```

SUMMARY   TOTAL ACTIONS: 7

Figure 5-11. Cost and Schedule Impacts (Criticality
             Analysis)

COST AND SCHEDULE SUMMARY REPORT
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   ILS MILESTONE: XXX
LAST SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXXX

Page #: 1   Report Date: XX/XX/XX

Process #	Title	Crit	Int	Rout	Sat	To Do
E1.1	Review Design for Logistical Impacts.	0	1	0	1	14
E1.2	Review Program Management Documentation for Completeness	0	0	1	5	3
E1.3A1	Review Tasks or Functions to Mission Requirements	0	0	0	0	11
E1.3A2	Review Maintenance Principles and Level of Repair.	0	0	0	0	11
E1.3A3	Review Personnel/Non-Personnel Resource Requirements	0	0	0	0	11
E1.3A4	Review (B) MC use of 3 Level Army Maintenance Structure	0	0	0	0	2
E1.3A5	Review Host Nation Support (HNS), Interservice Support	0	0	0	0	15
E1.3A6	Review Maintenance Task and Level of Repair Trade-Offs	0	0	0	0	2
E1.3A7	Assess Achievement of SPO and Supportability Objectives	0	0	0	0	3

Figure 5-12. Cost and Schedule Impacts (Weapon System Summary)

PERFORMANCE AND SUSTAINABILITY REPORT
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
------------------- QUESTION-------------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

------------------SUBQUESTION--------------------
-Identify functional groups that have placed at incorrect
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
 (This is a three line text field in which a short
explanation of the performance and sustainability impact
is included.)

-------------------------ACTION-------------------------

Figure 5-13. Performance and Sustainability Impacts Report
(Weapons System Current Status)

PERFORMANCE AND SUSTAINABILITY REPORT
CURRENT REVIEW SESSION
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
---------------------- QUESTION-----------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

-------------------SUBQUESTION---------------------
-Identify functional groups that have placed at incorrect
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
MS_SCHED_M -the long character field for MS_SCHED_M.
Information   about   this   record: qn=E1.4A1-02,
sn=9007181406.

-----------------------ACTION---------------------------

Figure 5-14. Performance and Sustainability Impacts Report
(Current Review Session)

PERFORMANCE AND SUSTAINABILITY REPORT
CRITICALITY ANALYSIS REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

```
EQUIPMENT ID:  XXXXXX          ILS MILESTONE:  XXX
LAST SESSION DATE: XX/XX/XX     REVIEWER: X. XXXXXX
```

Page #: 1   Report Date: XX/XX/XX

```
-------------------------CRITICAL-------------------------
E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1.02         ALERT DATE:            ACTION DATE:


E1.6A6           Review Warranty Implementation Plans
  E1.6A6-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX


E1.7A1           Review Sub-Assessments for Overall Consistency
  E1.7A1-02         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX


                              TOTAL CRITICAL ACTIONS:    3


----------------------INTERMEDIATE-------------------------
E1.1             Review Design for Logistical Impacts.
  E1.1-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX


E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1-03         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX


E1.6A7           Review SDC Plans and Execution.
  E1.6A7-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX


                          TOTAL INTERMEDIATE ACTIONS:    3


-------------------------ROUTINE-------------------------
E1.2             Review Program Management Documentation for
                 Completeness
  E1.2-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX


                              TOTAL ROUTINE ACTIONS:    3
```

SUMMARY   TOTAL ACTIONS: 7

Figure 5-15. Performance and Sustainability Impacts
             (Criticality Analysis)

PERFORMANCE AND SUSTAINABILITY SUMMARY REPORT
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   ILS MILESTONE: XXX
LAST SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXXX

Page #: 1   Report Date: XX/XX/XX

Process #	Title	Crit	Int	Rout	Sat	To Do
E1.1	Review Design for Logistical Impacts.	0	1	0	1	14
E1.2	Review Program Management Documentation for Completeness	0	0	1	5	3
E1.3A1	Review Tasks or Functions to Mission Requirements	0	0	0	0	11
E1.3A2	Review Maintenance Principles and Level of Repair.	0	0	0	0	11
E1.3A3	Review Personnel/Non-Personnel Resource Requirements	0	0	0	0	11
E1.3A4	Review (B) MC use of 3 Level Army Maintenance Structure	0	0	0	0	2
E1.3A5	Review Host Nation Support (HNS), Interservice Support	0	0	0	0	15
E1.3A6	Review Maintenance Task and Level of Repair Trade-Offs	0	0	0	0	2
E1.3A7	Assess Achievement of SRO and Supportability Objectives	0	0	0	0	3

Figure 5-16. Performance and Sustainability Impacts
(Weapon System Summary)

ACTION DATE LIST OF PROBLEM AREAS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ALERT DATE	DAYS LEFT
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX	-98
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX	-97
E1.1-07	NO	INTERMEDIATE	INTERMEDIATE	XX/XX/XX	-69
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX	228
E1.6A3-02	YES	---	---	XX/XX/XX	425

Figure 5-17. Alert and Action Schedule Dates
(Alert Date Items)

ACTION DATE LIST OF PROBLEM AREAS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE	DAYS LEFT
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX	-98
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX	-97
E1.1-07	NO	INTERMEDIATE	INTERMEDIATE	XX/XX/XX	-69
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX	228
E1.6A3-02	YES	---	---	XX/XX/XX	425

Figure 5-18. Alert and Action Schedule Dates
(Action Date Items)

APPENDIX A

ILS ELEMENT E11
DESIGN INFLUENCE

DATA FLOW DIAGRAMS

A-2
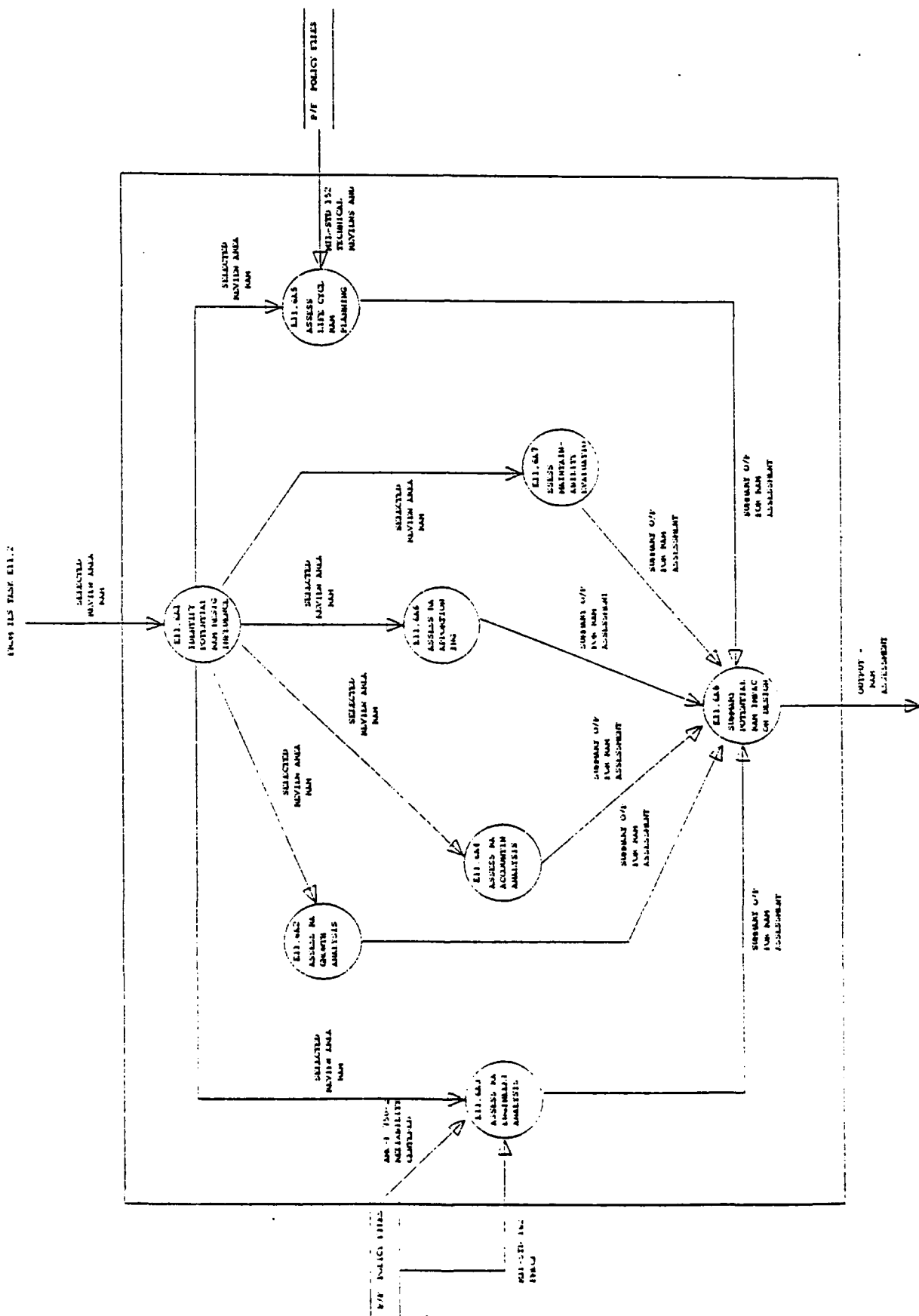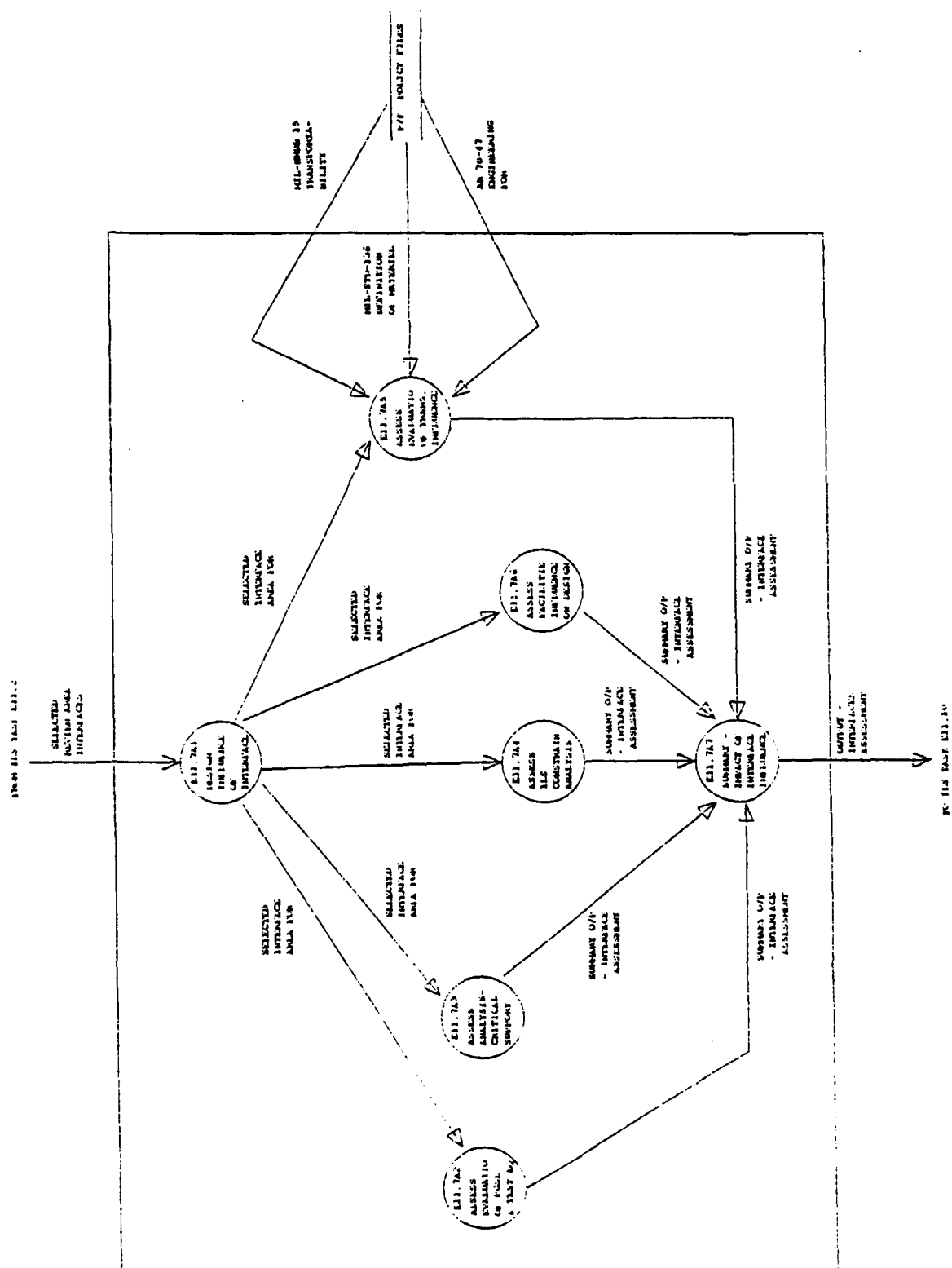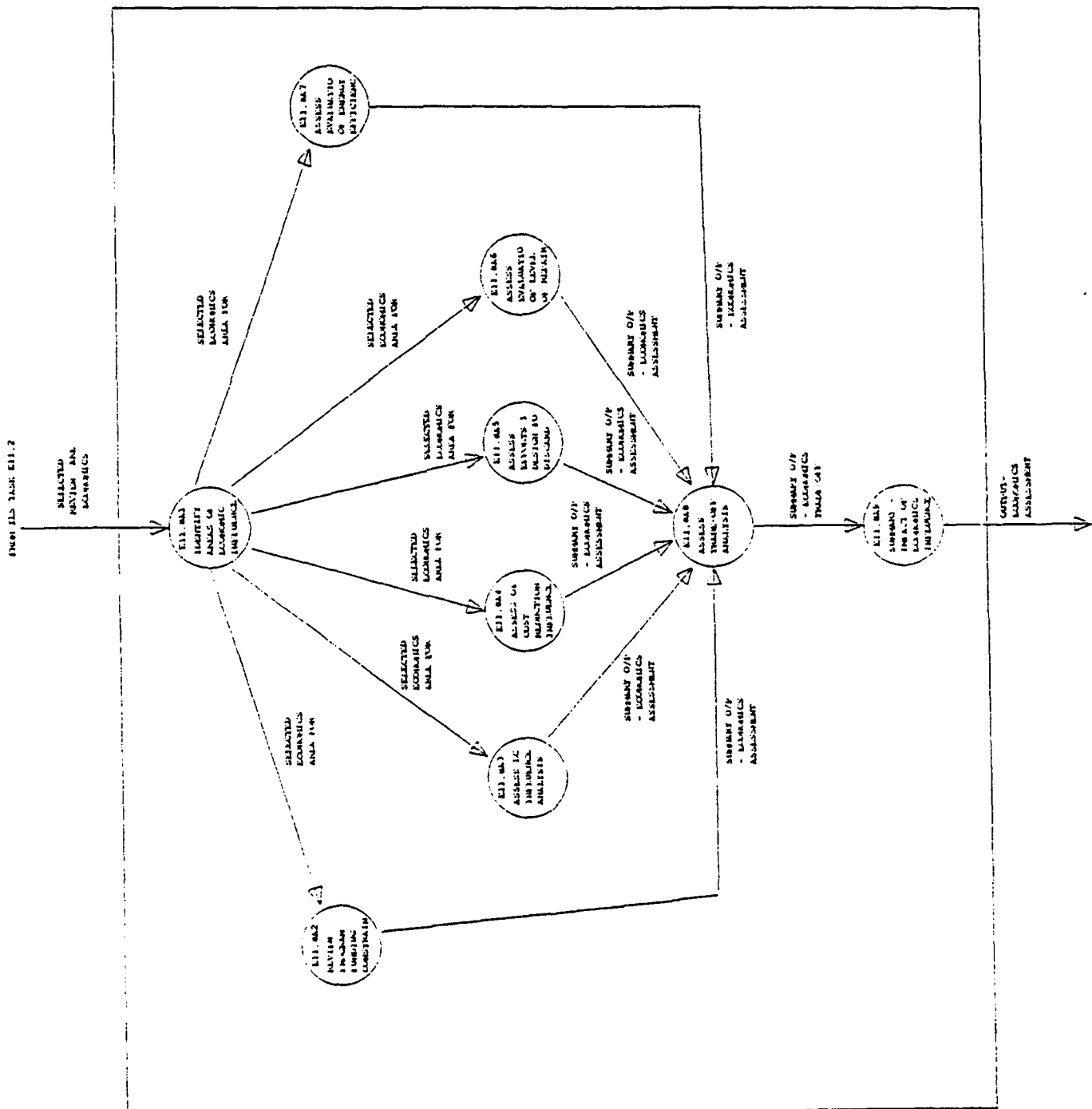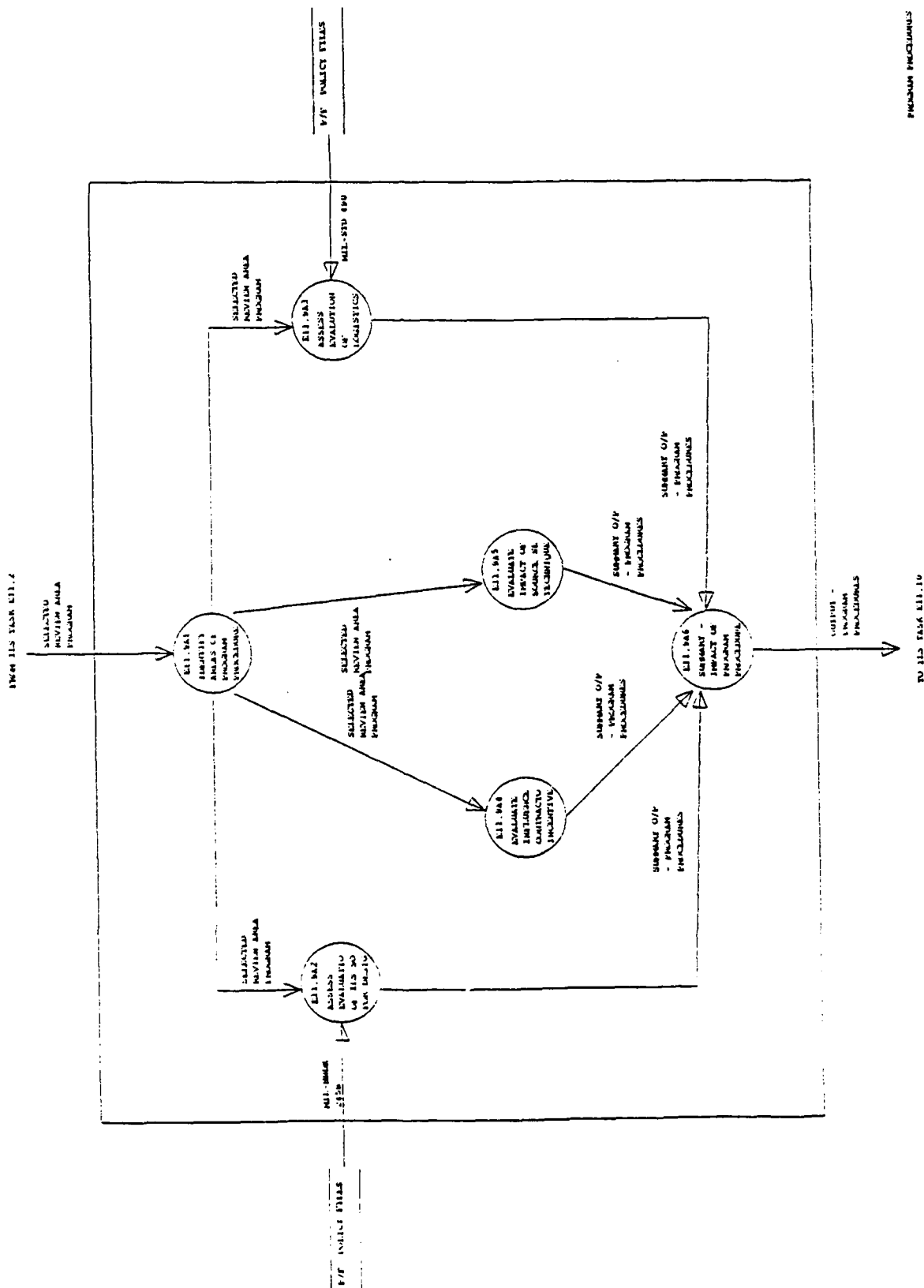
APPENDIX B

ILS ELEMENT E11 ASSESSMENT OF DESIGN INFLUENCE

THROUGHOUT THE QUESTIONS/ISSUES TO BE ADDRESSED TO ADEQUATELY COVER THE ILS ELEMENT OF DESIGN INFLUENCE, REFERENCES ARE MADE TO THE LOGISTIC SUPPORT ANALYSIS (LSA) TASKS AND LSA RECORDS (LSAR). THIS IS BECAUSE LSA IS THE SINGLE, UNIFORM APPROACH FOR CONDUCTING ACTIVITIES NECESSARY TO CAUSE SUPPORTABILITY REQUIREMENTS TO BE AN INTEGRAL PART OF SYSTEM REQUIREMENTS AND DESIGN, AND IS THE SELECTIVE APPLICATION OF ENGINEERING EFFORTS AS A PART OF SYSTEM ENGINEERING AND THE DESIGN PROCESS.

RESULTS FROM LSA TASKS GENERATE DATA THAT IS RECORDED AS LSA DOCUMENTATION, INCLUDING MANUAL AND/OR AUTOMATED LSAR DATA RECORDS. NOTE THAT LITTLE FORMAL LSAR DATA IS GENERATED IN THE EARLY PHASES OF THE MATERIEL DEVELOPMENT AND ACQUISITION PROGRAM. THE RESULTS OF EARLY LSA ARE DOCUMENTED THROUGH STUDY REPORTS AND RECOMMENDATIONS, AND USED TO DEFINE GROSS REQUIREMENTS AT SYSTEM AND MAJOR SUBSYSTEM LEVELS. MOST DETAILED LSAR DATA IS INITIATED IN THE DEVELOPMENT PHASE PROVIDED DURING THE FULL-SCALE DEVELOPMENT OR EQUIVALENT PHASE.

THE PRIMARY SOURCE OF VALIDATED AND INTEGRATED DESIGN RELATED SUPPORTABILITY DATA IS LSA DOCUMENTATION. IT IS ALSO THE AUDIT TRAIL OF SUPPORTABILITY RELATED DESIGN ANALYSIS AND DECISIONS, AND SERVES AS THE BASIS FOR ACTIONS AND DOCUMENTS RELATED TO ALL ILS ELEMENTS.

IT IS CRITICAL THAT ONLY SPECIFIC LSA TASK AREAS AND ONLY THE MINIMUM RANGE OF LSAR DATA BE SELECTED, BASED ON EACH PROGRAM TO EFFECTIVELY SATISFY PLANNING FOR SUPPORT OF THE NEW WEAPON SYSTEMS AND EQUIPMENT.

E11.1   DESIGN REVIEW PERSONNEL

SINCE INTEGRATED LOGISTIC SUPPORT (ILS) IS THE MANAGEMENT PROCESS TO FACILITATE DEVELOPMENT AND INTEGRATION OF LOGISTIC SUPPORT ELEMENTS TO ACQUIRE, FIELD, AND SUPPORT SYSTEMS, AN ILS MANAGEMENT TEAM (ILSMT) COORDINATES ILS PLANNING AND EXECUTION. DESIGN INFLUENCE IS AN INTANGIBLE ILS ELEMENT WHICH IMPACTS SIGNIFICANTLY ON SYSTEM READINESS, SUPPORTABILITY AND AFFORDABILITY. TO ENSURE THAT ILS GOALS AND THRESHOLDS INFLUENCE SYSTEM DESIGN, ILSMT MEMBERS MUST PARTICIPATE IN THE PROGRAM DESIGN AND LSA REVIEWS.

E11.1-1   HAVE PERSONNEL TO PARTICIPATE IN DESIGN REVIEWS
           BEEN IDENTIFIED FROM THE ILSMT MEMBERSHIP PLAN
           TO ENSURE REPRESENTATION BY ALL FUNCTIONAL AREAS
           THAT AFFECT SUPPORTABILITY AND SUPPORTABILITY-
           RELATED DESIGN REQUIREMENTS?

           o Yes

           o No

E11.1-2   IS LSA TASK 103, "PROGRAM AND DESIGN REVIEW",
           INCLUDED IN THE LSA PROGRAM TO PLAN AND PROVIDE
           FOR OFFICIAL REVIEW AND CONTROL OF RELEASED DESIGN
           INFORMATION IN A TIMELY AND CONTROLLED MANNER?

           o Yes

           o No
             - Determine if there is an equivalent
               requirement specified in the statement of
               work.

E11.1-3   HAVE REVIEW PERSONNEL BEEN ADVISED OF THEIR
           RESPONSIBILITY TO IDENTIFY FOR COORDINATED
           RESOLUTION THOSE IMPACTS OR PROPONENT
           REQUIREMENTS THAT MAY ADVERSELY AFFECT SYSTEM
           FIELDING?

           o Yes

           o No

E11.1-4   ARE DESIGN REVIEW PROCEDURES, AGENDAS, AND
           DOCUMENTED RESULTS OF EACH REVIEW BEING
           PROVIDED TO EACH REVIEW PARTICIPANT?

           o Yes

           o No

E11.1-5   ARE PERSONNEL INVOLVED IN DESIGN REVIEWS
           SUITABLE FOR ACCOMPLISHING A SUPPORTABILITY
           ASSESMENT OF DESIGN FEATURES INCLUDING
           SUPPORTABILITY, COST, AND READINESS DRIVERS
           AND NEW OR CRITICAL LOGISTIC SUPPORT RESOURCE
           REQUIREMENTS?

           o Yes

           o No

E11.1-6   ARE PERSONNEL INVOLVED IN DESIGN REVIEWS SUITABLE
           FOR IDENTIFYING DESIGN, SCHEDULE, OR ANALYSIS
           PROBLEMS AFFECTING SUPPORTABILITY?

           o Yes

           o No

E11.1-7   ARE PERSONNEL INVOLVED IN DESIGN REVIEWS SUITABLE
           FOR REVIEWING CORRECTIVE ACTIONS CONSIDERED,
           PROPOSED, OR TAKEN?

           o Yes

           o No

E11.2   SELECT APPLICABLE REVIEW AREA

E11.2-1   IS SELECTED REVIEW AREA BASED ON SUPPORTABILITY
           PROBLEMS AND SUPPORTABILITY, COST, AND
           READINESS DRIVERS IDENTIFIED IN THE BASELINE
           COMPARISON SYSTEM SELECTED OR DEVELOPED UNDER
           LSA TASK 203, COMPARATIVE ANALYSIS?

           o Yes

           o No

E11.2-2   HAVE APPROPRIATE SUPPORTABILITY AND SUPPORTABILITY-
           RELATED DESIGN CONSTRAINTS BEEN DEFINED BASED ON
           COST, MANPOWER, PERSONNEL, READINESS, OR SUPPORT
           POLICY CONSIDERATIONS?

           o Yes
             - Consider how LSA Task 202 results were used.
             - Comment on the use of mission hardware,
               software, and support system standardization
               in the development of supportability design
               constraints.

           o No

E11.2-3   DO REVIEW AREAS INCLUDE DESIGN PROBLEMS OR
           DEFICIENCIES AFFECTING SUPPORTABILITY
           IDENTIFIED BY PROCEDURES AND CONTROLS
           ESTABLISHED IN LSA TASK 102, OR THE LSA PLAN?

           o Yes
             - Determine if the review includes the assessment
               the status of actions required and taken to
               resolve the problems.

           o No

E11.3   ASSESS MANPRINT INFLUENCE ON DESIGN

E11.3A1   IDENTIFY MANPRINT INFLUENCE

E11.3A1-1 HAVE MANPRINT PARAMETERS BEEN PROJECTED FROM
           THE BASELINE COMPARISON SYSTEM SELECTED OR
           DEVELOPED UNDER LSA TASK 203?

           o Yes

           o No

E11.3A1-2 IS THE SYSTEM COMPLETELY FREE OF MANPRINT PROBLEMS
           WHICH WERE IDENTIFIED ON SIMILAR SYSTEMS THAT WERE
           PREVIOUSLY FIELDED?

           o Yes

           o No

E11.3A1-3   HAVE MANPRINT DOMAINS BEEN DETERMINED TO BE
             COST AND READINESS DRIVERS FOR THE NEW SYSTEM?

             o Yes

             o No

E11.3A1-4   HAVE QUANTITATIVE AND/OR QUALITATIVE MANPRINT
             DOMAIN DESIGN OBJECTIVES, GOALS, THRESHOLDS AND
             CONSTRAINTS BEEN ESTABLISHED FROM LSA TASK 205,
             SUPPORTABILITY AND SUPPORTABILITY-RELATED
             DESIGN FACTORS?

             o Yes

             o No

E11.3A1-5   HAS LSA TASK 301, "FUNCTIONAL REQUIREMENTS
             IDENTIFICATION" BEEN COMPLETED TO IDENTIFY
             DESIGN DEFICIENCIES REQUIRING REDESIGN?

             o Yes

             o No

E11.3A1-6   HAVE DESIGN ALTERNATIVES BEEN FORMULATED TO
             CORRECT DESIGN DEFICIENCIES UNCOVERED DURING THE
             FUNCTIONAL REQUIREMENTS IDENTIFICATION?

             c Yes
                - Indicate whether the design alternatives
                  reduce/simplify the functions affecting
                  MANPRINT domains.

             o No

E11.3A1-7   DO THE RESULTS OF LSA TASK 301 "FUNCTIONAL
             REQUIREMENTS IDENTIFICATION" INDICATE THAT THE
             DESIGN SIMPLIFIES OPERATOR/MAINTENANCE FUNCTIONS
             AND REDUCES THE EFFECT ON MANPRINT DOMAIN?

             o Yes

             o No

E11.3A1-8   HAS AN ANALYSIS BEEN CONDUCTED TO IDENTIFY
              MANPRINT ISSUES REQUIRING TRADE-OFF STUDIES UNDER
              LSA TASK 303?

              o Yes
                - What MANPRINT issues have been identified?
                - Where are they documented?

              o No

E11.3A1-9   HAVE MANPRINT ISSUES BEEN IDENTIFIED FOR TEST,
              EVALUATION AND VERIFICATION UNDER TASK 501?

              o Yes
                - Indicate methods for correcting deficiencies.

              o No

E11.3A2   ASSESS PLANS FOR HUMAN FACTORS ENGINEERING ANALYSIS
          (HFEA)

E11.3A2-1   IS HFE BEING PROPERLY APPLIED IN THE
              DEVELOPMENT OF HUMAN PERFORMANCE REQUIREMENTS
              AND FOR SYSTEMS WITH SPECIFIC SOLDIER-MATERIEL
              INTERFACE?

              o Yes

              o No

E11.3A2-2   ARE HFE CONSIDERATIONS AND DESIGN CRITERIA
              INTEGRATED INTO THE DEVELOPMENT OF PACKAGING,
              HANDLING STORAGE, MAINTENANCE, IDENTIFICATION,
              TRANSPORTATION, AND DISPOSAL?

              o Yes

              o No

E11.3A2-3   ARE HFE ISSUES INCLUDED IN TT, UT, FAT, TEST
             PLANNING AND FOE?

             o Yes
               - Indicate whether the results of theses tests
                 showed shortcomings in HFE.

             o No
               - What is the status of implementing necessary
                 corrective action?

E11.3A2-4   IS A HUMAN FACTORS ENGINEER FROM THE HUMAN
             ENGINEERING LABORATORY AN ACTIVE MEMBER OF THE
             MANPRINT JWG?

             o Yes
               - Indicate whether he was involved in the
                 requirement to conduct a HFEA at the
                 conclusion of each materiel acquisition phase
                 IAW AR 602-1?

             o No

E11.3A2-5   IS HFE BEING APPLIED TO APPLICABLE ILS PROGRAM
             ELEMENTS AND TO SYSTEM DESIGN APPROACHES TO ASSURE
             COMPATIBILITY WITH THE CAPABILITIES AND
             LIMITATIONS OF OPERATIONS AND MAINTENANCE
             PERSONNEL?

             o Yes

             o No
               - Indicate whether HFE was considered, and if
                 not, why not

E11.3A3 ASSESS SYSTEM MANPRINT MANAGEMENT PLAN (SMMP)

E11.3A3-1   DOES THE SMMP SERVE AS A STAND-ALONE PLANNING
             AND MANAGEMENT GUIDE AND AUDIT TRAIL TO
             IDENTIFY THE TASKS, ANALYSES, TRADE-OFFS, AND
             DECISIONS THAT MUST ADDRESS MANPRINT ISSUES?

             o Yes
               - Provide a rationale for selecting tasks,
                 analysis, trade-offs that are going to be
                 performed.

             o No

E11.3A3-2   HAS IT BEEN UPDATED TO REMAIN CURRENT BY
             PROVIDING NEW INFORMATION OR DATA AS THE
             ACQUISITION PROCESS PROGRESSES?

             o Yes

             o No

E11.3A3-3   DOES IT DOCUMENT AVAILABLE DATA AND LIST
             MILESTONES FOR DATA TO BE GENERATED?

             o Yes

             o No

E11.3A3.4   DOES IT PROVIDE A COURSE OF ACTION TO IDENTIFY
             AND ADDRESS MANPRINT CONCERNS, LIST RANGE OF
             OPTIONS TO BE STUDIED, AND DOCUMENT RESULTS?

             o Yes

             o No

E11.3A3.5   DOES TAB D OF THE SMMP, QUESTIONS TO BE RESOLVED,
             LIST QUESTIONS WHOSE ANSWERS WILL INFLUENCE THE
             MANPRINT DECISIONS AND TRADE-OFFS TO BE MADE?

             o Yes
               - Indicate whether they are detailed and
                 specific in nature.
               - Indicate whether the SMMP has been
                 coordinated with all MANPRINT program
                 participants.

             o No

E11.3A4   ASSESS EVALUATION OF SKILLS INFLUENCE

E11.3A4-1   DO THE STATEMENTS OF WORK IN THE RFP IDENTIFY THE
               QUANTITY QUALIFICATION OF THE SOLDIERS WHO WILL
               OPERATE, MAINTAIN, AND SUPPORT THE NEW SYSTEM?

               o Yes

               o No

E11.3A4-2   ARE ALL THE VARIABLES RELEVANT TO DESIGN
               CHARACTERISTICS FOR MEETING PERFORMANCE
               REQUIREMENTS (INCLUDING SKILL LEVEL AND
               EXPERIENCE) OF THE POOL OF SOLDIERS ADDRESSED?

               o Yes

               o No

E11.3A4-3   ARE RELEVANT VARIABLES BASED ON TASKS THAT MUST
               BE PERFORMED TO OPERATE, MAINTAIN, AND SUPPORT
               THE SYSTEM?

               o Yes

               o No

E11.3A4-4   ARE MOS DESCRIPTIONS AT DIFFERENT SKILL LEVELS
               PROVIDED TO DESIGNERS ABOUT JOBS PERFORMED IN THE
               SPECIALTY, TASK TRAINing, AND MAJOR DUTIES?

               o Yes

               o No

E11.3A4-5   DOES THE DESIGN MINIMIZE THE NEED FOR ADDITIONAL
               SKILLS OR TRAINING TO THE MAXIMUM FEASIBLE EXTENT?

               o Yes

               o No

E11.3A5   ASSESS EVALUATION OF MANPOWER REQUIRED

E11.3A5-1   ARE MANPOWER (NUMBER OF PERSONNEL AND GRADE LEVEL DISTRIBUTION FOR EACH MOS) GOALS AND CONSTRAINTS INCLUDED IN THE REQUIREMENT DOCUMENTS, SMMP, SOLICITATION DOCUMENTS, TEMP AND INDEPENDENT EVALUATION PLANS?

o Yes

o No

E11.3A5-2   DOES THE SYSTEM DESIGN CONSIDER MANPOWER NUMBERS FOR OPERATION AS WELL AS FOR MAINTENANCE, REPAIR, AND SUPPORT?

o Yes

o No

E11.3A5-3   IS THE OPERATOR AND MAINTAINER WORKLOAD (NUMBER AND FREQUENCY OF TASKS) RESULTING FROM THE SYSTEM DESIGN COMPATIBLE WITH MANPOWER AUTHORIZATIONS?

o Yes

o No

E11.3A5-4   COULD A TRADE-OFF BE CONSIDERED IN THE SYSTEM DESIGN TO REDUCE MANPOWER REQUIREMENTS BY REALLOCATING THE FUNCTION OR TASK TO A MACHINE OR A MAN/MACHINE CAPABILITY?

o Yes

o No

E11.3A5-5   ARE ANALYTICAL TECHNIQUES SPECIFIED IN TAB C OF THE SMMP TO DEVELOP MANPOWER GOALS AND CONSTRAINTS?

o Yes
  - Comment on whether such techniques address trade-offs or alternate design options, and validation of design requirements.

o No

E11.3A6 PHYSICAL CONSTRAINT

E11.3A6-1   HAS A COMPARISON BEEN MADE TO DETERMINE IF THE
              DESIGN CHARACTERISTICS FOR PERFORMANCE OF
              OPTIMUM MAINTENANCE AND SYSTEM SUPPORT TASKS
              BY THE TARGET POPULATION AGREES WITH THOSE
              CHARACTERISTICS OF THE TARGET MOs CONTAINED IN
              THE TARGET AUDIENCE DESCRIPTION, TAB G OF THE
              SMMP?

              o Yes
                - Consider the 70 lb. limitation on packages
                  being subject to individual handling at the
                  tactical unit level.

              o No

E11.3A6-2   IS THERE ADEQUATE SPACE FOR PERSONNEL, THEIR
              EQUIPMENT, AND FREE VOLUME FOR THE MOVEMENTS
              AND ACTIVITIES THEY ARE REQUIRED TO PERFORM
              DURING OPERATION AND MAINTENANCE TASKS?

              o Yes

              o No

E11.3A6-3   DOES THE DESIGN PROVIDE AN EFFICIENT
              ARRANGEMENT OF OPERATION AND MAINTENANCE
              WORKPLACES, EQUIPMENT, CONTROLS, AND DISPLAYS?

              o Yes

              o No

E11.3A6-4   HAS HUMAN ENGINEERING DESIGN CRITERIA WHICH
              DEFINES THE NATURE AND LIMITS OF HUMAN
              CAPABILITIES APPLIED DURING SYSTEM DESIGN TO
              ACHIEVE OPTIMUM COMPATIBILITY BETWEEN EQUIPMENT
              AND HUMAN PERFORMANCE?

              o Yes

              o No

E11.3A6-5   DOES THE SYSTEM DESIGN PROVIDE WORK
             ENVIRONMENTS WHICH DO NOT EXCEED OPERATOR AND
             MAINTAINER CAPABILITIES REGARDING REQUIRED
             WORKLOAD, ACCURACY, TIME CONSTRAINTS, MENTAL
             PROCESSING AND COMMUNICATION REQUIREMENTS?

             o Yes

             o No

E11.3A6-6   ARE CONTROLS, DISPLAYS, MARKING, CODING,
             LABELING AND ARRANGEMENT SCHEMES OF EQUIPMENT
             AND PANEL LAYOUT UNIFORM FOR COMMON FUNCTIONS
             OF ALL EQUIPMENT?

             o Yes

             o No

E11.3A6-7   DOES THE DESIGN INCORPORATE APPLICABLE SYSTEM
             AND PERSONNEL SAFETY FACTORS INCLUDING
             MINIMIZATION OF POTENTIAL HUMAN ERROR IN THE
             OPERATION AND MAINTENANCE OF THE SYSTEM?

             o Yes

             o No

E11.3A6-8   IS THERE ADEQUATE OR ARTIFICIAL ILLUMINATION
             FOR PERFORMANCE OF OPERATION, CONTROL,
             TRAINING, AND MAINTENANCE?

             o Yes

             o No

E11.3A6-9   ARE THE DESIGN, LOCATION AND LAYOUT OF CONTROLS,
             DISPLAYS, WORKSPACES, AND MAINTENANCE ACCESSES
             COMPATIBLE   WITH   THE   CLOTHING   AND   PERSONAL
             EQUIPMENT TO BE WORN BY OPERATORS AND
             MAINTAINERS?

             o Yes
               - Discuss whether these task allocations and
                 control movements are compatible with
                 restrictions imposed on human performance by
                 the clothing and personal equipment.

             o No

E11.3A6-10   DOES THE EQUIPMENT REPRESENT THE SIMPLEST
              DESIGN CONSISTENT WITH FUNCTIONAL REQUIREMENTS
              AND SERVICE CONDITIONS TO ENABLE OPERATION,
              MAINTENANCE, AND REPAIR BY PERSONNEL WITH A
              MINIMUM OF TRAINING?

              o Yes

              o No

E11.3A7   TRAINING

E11.3A7-1   ARE TRAINING CONSTRAINTS INCLUDED IN THE
              OPERATIONAL AND ORGANIZATIONAL (O&O) PLAN AND
              THE SMMP? (TRAINING CONSTRAINTS INCLUDE DESIGN
              REQUIREMENT TO ELIMINATE OR SIMPLIFY IDENTIFIED
              HIGH DRIVER TASKS, COMPLETE TRAINING WITHIN
              TIME LIMITS, AND PROVIDE FOR SIMULATORS TO MEET
              CONSTRAINTS OF TRAINING RESOURCES.)

              o Yes

              o No

E11.3A7-2   DOES THE TRAINING ASSESSMENT IN THE REQUIRED
              OPERATIONAL CAPABILITY (ROC) INCLUDE THE NEED
              FOR SYSTEM TRAINING DEVICES TO SUPPORT
              INSTITUTIONAL TRAINING AND EMBEDDED TRAINING
              CAPABILITY TO SUPPORT INDIVIDUAL TRAINING?

              o Yes
                - Discuss requirements for development of a
                  training package and extension training
                  materials.

              o No

E11.3A7-3   WAS LSA TASK 303.2.6, "TRAINING TRADE-OFFS"
              CONDUCTED TO CONSIDER REQUIREMENT FOR
              DESIGN OF TRAINING SIMULATORS?

              o Yes

              o No

E11.3A7-4   IS DESIGN, DEVELOPMENT, DELIVERY, INSTALLATION
             AND LOGISTIC SUPPORT OF REQUIRED TRAINING
             DEVICES INCLUDED?

             o Yes

             o No

E11.4   SAFETY INFLUENCE

        IS IT IMPOSSIBLE OR IMPRACTICAL TO DESIGN A SYSTEM
THAT IS COMPLETELY HAZARD-FREE?   A HAZARD IS AN EXISTING OR
LIKELY CONDITION THAT CAN CAUSE AN ACCIDENT WHICH IS AN
UNPLANNED EVENT THAT RESULTS IN ILLNESS, INJURY, OR DEATH TO
PERSONNEL OR DAMAGE TO EQUIPMENT OR PROPERTY.   SYSTEM SAFETY
INVOLVES DESIGNING THE OPTIMUM DEGREE OF SAFETY AND HEALTH
FEATURES WITHIN THE BOUNDS OF OPERATIONAL EFFECTIVENESS,
TIME, AND COST TO REDUCE AND CONTROL HAZARDS AND THEIR
ASSOCIATED RISKS TO AN ACCEPTABLE LEVEL.

        SYSTEM SAFETY REQUIREMENTS MUST BE SATISFIED BY
FOLLOWING AN ORDER OF PRECEDENCE SPECIFIED IN MIL-STD-882B,
"SYSTEM SAFETY PROGRAM REQUIREMENTS"

E11.4A1   POTENTIAL SAFETY INFLUENCE

E11.4A1-1   WHEN POTENTIALLY HAZARDOUS MATERIALS MUST BE
             USED, IS SELECTION BASED UPON THE LEAST RISK
             THROUGHOUT THE LIFE CYCLE OF THE SYSTEM?

             o Yes

             o No

E11.4A1-2   ARE HAZARDOUS SUBSTANCES, COMPONENTS, AND
             OPERATIONS ISOLATED FROM OTHER ACTIVITIES,
             AREAS, PERSONNEL, AND INCOMPATIBLE MATERIALS?

             o Yes

             o No

E11.4A1-3   IS THE REQUIRED USE OF HAZARDOUS MATERIALS IN
             THE SYSTEM DESIGN KEPT TO AN ABSOLUTE MINIMUM
             TO REDUCE HAZARDS ASSOCIATED WITH OPERATION,
             TRANSPORTATION, MAINTENANCE, HANDLING, AND
             FUTURE DISPOSAL REQUIREMENTS?

             o Yes

             o No

E11.4A1-4   IS EQUIPMENT LOCATED SO THAT ACCESS DURING
             OPERATION, SERVICING, MAINTENANCE, REPAIR, OR
             ADJUSTMENT MINIMIZES PERSONNEL EXPOSURE TO
             HAZARDOUS CHEMICALS, HIGH VOLTAGE, ELECTRO-
             MAGNETIC RADIATION, CUTTING EDGES OR SHARP
             POINTS?

             o Yes

             o No

E11.4A1-5   IS RISK MINIMIZED WHICH WOULD RESULT FROM
             EXCESSIVE TEMPERATURES, PRESSURE, NOISE,
             TOXICITY, ACCELERATION, AND VIBRATION?

             o Yes

             o No

E11.4A1-6   DOES DESIGN MINIMIZE RISKS CREATED BY HUMAN
             ERROR IN OPERATION AND SUPPORT OF THE SYSTEM?

             o Yes

             o No

E11.4A1-7   WHEN HAZARDS EXIST, ARE ASSOCIATED RISKS
             MINIMIZED BY INCORPORATION OF INTERLOCKS,
             REDUNDANCY, FAIL-SAFE DESIGN, FIRE SUPPRESSION,
             AND PROTECTIVE CLOTHING, EQUIPMENT, DEVICES,
             AND PROCEDURES?

             o Yes

             o No

E11.4A1-8   ARE POWER SOURCES, CONTROLS, AND CRITICAL
             COMPONENTS OF REDUNDANT SUBSYSTEMS PROTECTED BY
             PHYSICAL SEPARATION OR SHIELDING?

             o Yes

             o No

E11.4A1-9   ARE DISTINCTIVE MARKINGS INCLUDED ON HAZARDOUS
             COMPONENTS, MATERIALS, AND EQUIPMENT?

             o Yes

             o No

E11.4A1-10   ARE STANDARDIZED WARNING AND CAUTION NOTES
             PROVIDED IN ASSEMBLY, OPERATION, MAINTENANCE,
             AND REPAIR INSTRUCTIONS?

             o Yes

             o No

E11.4A2   HAZARD ANALYSIS

E11.4A2-1   IS TASK 100 OF MIL-STD-882B SPECIFIED TO
             CONDUCT A BASIC SYSTEM SAFETY PROGRAM AS A
             PREREQUISITE FOR IMPOSING MIL-STD-882B TASKS?

             o Yes

             o No

E11.4A2-2   IS TASK 105, "HAZARD TRACKING AND RISK
             RESOLUTION", OF MIL-STD-882B SPECIFIED TO
             DEVELOP AND MAINTAIN A SINGLE CLOSED-LOOP
             HAZARD TRACKING SYSTEM TO PROVIDE AN AUDIT
             TRAIL OF HAZARD RESOLUTION?

             o Yes

             o No

E11.4A2-3   IS TASK 201, "PRELIMINARY HAZARD LIST", OF MIL-
             STD-882B SPECIFIED TO IDENTIFY POSSIBLY
             INHERENT HAZARDS THAT MAY REQUIRE SPECIAL
             SAFETY DESIGN EMPHASIS OR IN-DEPTH ANALYSIS?

             o Yes

             o No

E11.4A2-4   IS TASK 202, "PRELIMINARY HAZARD ANALYSIS", OF
             MIL-STD-882B SPECIFIED TO IDENTIFY SAFETY
             CRITICAL AREAS AND DEVELOP SAFETY DESIGN
             CRITERIA?

             o Yes

             o No

E11.4A2-5   DOES THE PRELIMINARY HAZARD ANALYSIS (PHA)
             CONSIDER ALL HAZARDOUS COMPONENTS, SAFETY-
             RELATED INTERFACE CONSIDERATIONS, ENVIRONMENTAL
             CONSTRAINTS; OPERATING, TEST, MAINTENANCE AND
             EMERGENCY PROCEDURES, INCLUDING HUMAN ERROR
             ANALYSIS; FACILITIES, SUPPORT EQUIPMENT AND
             TRAINING; AND SAFETY-RELATED EQUIPMENT AND
             SAFEGUARDS?

             o Yes

             o No

E11.4A2-6   IS THE PHA STRUCTURED FOR CONTINUAL REVISION
             AND UPDATING UNTIL TERMINATED AT THE START OF
             SUBSYSTEM HAZARD ANALYSIS?

             o Yes

             o No

E11.4A2-7   IS TASK 203, "SUBSYSTEM HAZARD ANALYSIS (SSHA)",
             OF MIL-STD-882B SPECIFIED FOR SPECIFIC SUBSYSTEMS
             TO IDENTIFY HAZARDS RELATED TO COMPONENT FAILURE
             MODES, CRITICAL HUMAN EFFORT INPUTS, AND HAZARDS
             HAZARDS RESULTING FROM FUNCTIONAL RELATIONSHIPS
             BETWEEN COMPONENTS AND EQUIPMENT OF THE SUBSYSTEM?

             o Yes

             o No

E11.4A2-8   ARE ANALYSIS TECHNIQUES SPECIFIED, SUCH AS
             FAULT-HAZARD ANALYSIS, FAULT-TREE ANALYSIS, AND
             SNEAK CIRCUIT ANALYSIS?

             o Yes

             o No

E11.4A2-9   IS TASK 204, "SYSTEM HAZARD ANALYSIS (SHA)", OF
             MIL-STD-882B SPECIFIED TO DETERMINE SAFETY
             PROBLEM AREAS OF THE TOTAL SYSTEM DESIGN,
             INCLUDING POTENTIAL SAFETY CRITICAL HUMAN
             ERRORS AND SUBSYSTEM INTERFACES?

             o Yes

             o No

E11.4A3   SYSTEM SAFETY PROGRAM PLAN (SSPP)

E11.4A3-1   IS TASK 101 OF MIL-STD-882B AND DATA ITEM DI-H
             7047A SPECIFIED TO DEVELOP AND PROVIDE A SYSTEM
             SAFETY PROGRAM PLAN?

             o Yes

             o No

E11.4A3-2   ARE PROCEDURES ESTABLISHED BY WHICH THE
             CONTRACTOR WILL INTEGRATE AND COORDINATE SYSTEM
             SAFETY EFFORTS, INCLUDING HAZARD ANALYSIS AND
             PROGRAM AND DESIGN REVIEWS?

             o Yes

             o No

E11.4A3-3   ARE SAFETY DESIGN CRITERIA DESCRIBED AND SAFETY
             STANDARDS LISTED TO SATISFY SAFETY
             REQUIREMENTS?

             o Yes

             o No

E11.4A3-4   ARE CLOSED-LOOP PROCEDURES DESCRIBED FOR
             ACTIONS TO RESOLVE IDENTIFIED HAZARDS,
             INCLUDING VERIFICATION?

             o Yes

             o No

E11.4A4   SAFETY COMPLIANCE ASSESSMENT

E11.4A4-1   IS TASK 210 OF MIL-STD-882B AND DI-H-7049A
             SPECIFIED TO PERFORM AND DOCUMENT A SAFETY
             COMPLIANCE ASSESSMENT TO VERIFY COMPLIANCE WITH
             SAFETY REQUIREMENTS AND ENSURE A SAFE DESIGN
             AND EVALUATE THE SAFETY RISK BEING ASSUMED
             PRIOR TO TEST OR OPERATION OF A SYSTEM?

             o Yes

             o No

E11.4A4-2   DOES THE ASSESSMENT DOCUMENT COMPLIANCE OF THE
             DESIGN AND PROCEDURES WITH CONTRACTUAL SAFETY
             REQUIREMENTS?

             o Yes

             o No

E11.4A4-3   DOES THE ASSESSMENT EVALUATE RESIDUAL HAZARDS
             INHERENT IN THE SYSTEM OR THAT ARISE FROM
             INSTALLATION, TEST, OPERATION, MAINTENANCE, OR
             SUPPORT OF THE SYSTEM?

             o Yes

             o No

E11.4A4-4   ARE REQUIRED SAFETY DESIGN FEATURES, DEVICES,
             PROCEDURES, SKILLS, TRAINING, SUPPORT
             REQUIREMENTS, AND PERSONNEL PROTECTIVE
             EQUIPMENT IDENTIFIED?

             o Yes

             o No

E11.4A4-5   ARE PRECAUTIONS AND PROCEDURES IDENTIFIED FOR
             SAFE STORAGE, HANDLING, TRANSPORT, USE AND
             DISPOSAL OF HAZARDOUS MATERIALS?

             o Yes

             o No

E11.4A5   REVIEW ENVIRONMENTAL IMPACT STATEMENT

E11.4A5-1   HAS THE SYSTEM BEEN REVIEWED TO DETERMINE
             WHETHER AN ENVIRONMENTAL ASSESSMENT OR AN
             ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED
             BASED ON CRITERIA AND QUALIFICATION FOR
             EXCLUSION CONTAINED IN AR 200-2?

             o Yes

             o No

E11.4A5-2   ARE THERE DESIGN CONSIDERATIONS WHICH CAN BE
             INCORPORATED TO PROVIDE MITIGATION MEASURES TO
             REDUCE OR AVOID ADVERSE ENVIRONMENTAL EFFECTS?

             o Yes

             o No

E11.4A5-3   IF AN ENVIRONMENTAL ASSESSMENT IS REQUIRED TO
             EXAMINE THE NEW SYSTEM, HAVE ALTERNATIVES BEEN
             CONSIDERED WHICH WILL NOT HAVE A SIGNIFICANT
             EFFECT ON THE HUMAN ENVIRONMENT AND THAT WILL
             NOT REQUIRE AN ENVIRONMENTAL IMPACT STATEMENT?

             o Yes

             o No

E11.4A5-4   IS THE DESIGN OF THE NEW WEAPON SYSTEM SIMILAR TO
             EXISTING SYSTEMS WHICH HAVE BEEN PREVIOUSLY
             EXAMINED AND FOUND TO MEET CRITERIA NOT REQUIRING
             AN ENVIRONMENTAL ASSESSMENT OR ENVIRONMENTAL
             IMPACT STATEMENT?

             o Yes

             o No

E11.5   ASSESS TECHNOLOGY INFLUENCE ON DESIGN

E11.5A1   DESIGN OPPORTUNITIES FOR SUPPORTABILITY

E11.5A1-1   IS TASK 204, TECHNOLOGICAL OPPORTUNITIES, OF MIL-
              STD-1388-1A SPECIFIED TO IDENTIFY AND EVALUATE
              DESIGN OPPORTUNITIES FOR IMPROVEMENT OF THE NEW
              SYSTEMS SUPPORTABILITY CHARACTERISTICS?

              o Yes

              o No

E11.5A1-2   COMMENT ON WHETHER THE IDENTIFIED DESIGN
              IMPROVEMENTS HAVE THE POTENTIAL FOR REDUCING
              LOGISTIC SUPPORT REQUIREMENTS, REDUCING COSTS, OR
              ENHANCING SYSTEM REQUIREMENTS?

              o Yes

              o No

E11.5A1-3   ARE THERE DESIGN IMPROVEMENTS TO LOGISTIC
              ELEMENTS, E.G., SUPPORT EQUIPMENT AND TRAINING
              DEVICES THAT ARE IDENTIFIED AND CAN BE APPLIED
              TO INCREASE THE SUPPORT SYSTEM EFFECTIVENESS OR
              ENHANCE THE SYSTEM READINESS?

              o Yes

              o No

E11.5A1-4   HAVE SUPPORTABILITY, COST, AND READINESS VALUES
              AND DRIVERS BEEN IDENTIFIED, ALONG WITH
              QUALITATIVE SUPPORTABILITY PROBLEMS FOR
              COMPARATIVE SYSTEMS FROM TASK 203 OF MIL-STD-
              1388-1A?

              o Yes

              o No

E11.5A1-5   HAVE ASSOCIATED RISKS, VERIFICATION APPROACHES,
              FUNDING, COST, AND SCHEDULE IMPACTS BEEN
              IDENTIFIED FOR THE POTENTIAL IMPROVEMENTS?

              o Yes

              o No

E11.5A2   IDENTIFY DESIGN CHANGES FROM USE STUDY 201

E11.5A2-1   ARE PERTINENT SUPPORTABILITY FACTORS RELATED TO
THE INTENDED USE OF THE NEW SYSTEM IDENTIFIED
FROM TASK 201 OF MIL-STD-1388-1A?

o Yes

o No

E11.5A2-2   DOES QUALITATIVE DATA DOCUMENTED TO INCLUDE
OPERATING REQUIREMENTS, TRANSPORTATION FACTORS,
ALLOWABLE MAINTENANCE PERIODS, ENVIRONMENTAL
REQUIREMENTS, AND QUANTITY OF SYSTEMS TO BE
SUPPORTED?

o Yes

o No

E11.5A2-3   ARE SUPPORTABILITY RISKS ASSOCIATED WITH PLANNED
NEW TECHNOLOGY DOCUMENTED IN TASK 205,
SUPPORTABILITY AND SUPPORTABILITY DESIGN FACTORS,
OF MIL-STD-1388-1A?

o Yes

o No

E11.5A3   PREPLANNED PRODUCT IMPROVEMENT

E11.5A3-1   HAVE STRATEGIES BEEN DEVELOPED TO INCORPORATE NEW
TECHNOLOGIES AS PREPLANNED PRODUCT IMPROVEMENTS
INTO NEW SYSTEMS DESIGNS THAT MINIMIZE SUPPORT
BURDENS, REDUCE RESOURCE REQUIREMENTS AND
SUPPORTABILITY RISKS.

o Yes

o No

E11.5A3-2   IS THE DESIGN COMPATIBLE TO ENHANCE FUTURE
APPLICATION OF PROJECTED TECHNOLOGY?

o Yes

o No

E11.5A4   STATE-OF-THE-ART

E11.5A4-1   ARE CURRENT RELIABILITY, MAINTAINABILITY, AND
              SUPPORT SYSTEM DESIGN IMPROVEMENTS AVAILABLE
              FOR OTHER STATEMENT-OF-THE-ART SYSTEMS AND
              EQUIPMENT UTILIZED AS INPUT TO TASK 204,
              TECHNOLOGICAL OPPORTUNITIES, OF MIL-STD-1388-1A?

              o Yes

              o No

E11.6   ASSESS RAM INFLUENCE ON DESIGN

E11.6A1   IDENTIFY POTENTIAL RAM DESIGN INFLUENCE

E11.6A1-1   ARE THE RELIABILITY (R) AND MAINTAINABILITY (M)
              PROGRAMS ESTABLISHED BY SELECTION OF SPECIFIC
              TASKS FROM MIL-STD-785B AND MIL-STD-470A?

              o Yes

              o No

E11.6A1-2   ARE SELECTED TASKS ALSO TAILORED TO MEET PROGRAM
              NEEDS?

              o Yes

              o No

E11.6A1-3   DOES THE R&M PROGRAM INCLUDE AN APPROPRIATE MIX
              OF MANAGEMENT, ENGINEERING, AND ACCOUNTING TASKS
              WHICH IS BASED ON IDENTIFIED PROGRAM NEEDS?

              o Yes

              o No

E11.6A1-4   HAVE APPLICABLE SYSTEM R&M PARAMETERS BEEN
              DEFINED AND QUANTITATIVE VALUES DETERMINED?
              (INCLUDE THE DISTINCTION BETWEEN BASIC RELIABILITY
              REQUIREMENTS FOR ITEM DESIGN.)

              o Yes

              o No

E11.6A1-5   ARE SYSTEM RELIABILITY PARAMETERS DEFINED IN UNITS
OF MEASUREMENT DIRECTLY RELATED TO OPERATIONAL
READINESS, MISSION SUCCESS, DEMAND FOR MAINTENANCE
MANPOWER AND DEMAND FOR LOGISTIC SUPPORT?

    o Yes

    o No

E11.6A1-6   ARE PERFORMANCE AND ANALYSIS OF R&M TASKS THAT ARE
RELATED AND SIMILAR IN PURPOSE AND OBJECTIVES
COORDINATED AND WHERE POSSIBLE, COMBINED?

    o Yes

    o No

E11.6A1-7   IS R&M DATA RESULTING FROM APPLICABLE TASKS USED
SATISFY THE LSAR REPORTING REQUIREMENTS?

    o Yes

    o No

E11.6A1-8   DOES THE CONTRACT SPECIFY HOW R&M VALUES WILL BE
TESTED TO ASSURE COMPLIANCE

    o Yes

    o No

E11.6A2   RAM GROWTH ANALYSIS

E11.6A2-1   IS THERE A FORMALIZED RELIABILITY INDICATED VIA
GROWTH CURVES AND CONTRACTUAL PROVISIONS TO
IDENTIFY AND CORRECT INITIAL DESIGN AND
ENGINEERING DEFICIENCIES TO REACH PREDICTED
RELIABILITY LEVELS BY ACHIEVING A MATURE SYSTEM
PRIOR TO FULL PRODUCTION OR FIELD USE?

    o Yes

    o No

E11.6A1-2   IS AN ITERATIVE TEST-FAIL-CORRECT OR TEST-ANALYZE
             AND FIX PROCESS SPECIFIED FOR RELIABILITY GROWTH?

             o Yes

             o No

E11.6A2-3   IS THE STATUS OF IMPLEMENTING CORRECTIVE ACTIONS
             FOR FAILURES IDENTIFIED TO DATE SUCH THAT THERE
             IS CONFIDENCE THAT RAM THRESHOLDS WILL BE EXCEEDED
             PRIOR TO A PRODUCTION DECISION?

             o Yes

             o No

E11.6A2-4   IS RELIABILITY GROWTH INCORPORATED INTO THE
             CONTRACT BY SPECIFYING TASK 104, "FAILURE
             REPORTING SYSTEM ANALYSIS AND CORRECTIVE ACTION
             SYSTEM (FRACAS)" AS A PREREQUISITE FOR TASK 302,
             "RELIABILITY DEVELOPMENT/GROWTH TEST PROGRAM",
             FROM MIL-STD-785B?

             o Yes
               - Indicate whether MIL-STD-2155 is specified
                 to describe the FRACAS.

             o No

E11.6A2-5   ARE TASKS 104, "DATA COLLECTION, ANALYSIS, AND
             CORRECTIVE ACTION SYSTEM", AND 301,
             "MAINTAINABILITY DEMONSTRATION" OF MIL-STD-
             470A, SPECIFIED TO ESTABLISH A DATA COLLECTION
             AND ANALYSIS SYSTEM, IDENTIFY CORRECTIVE ACTIONS
             AND EVALUATE TEST RESULTS?

             o Yes

             o No

E11.6A2-6   ARE TASKS 104 AND 301 SPECIFIED TO VERIFY THAT
             DESIGN COMPLIES WITH MAINTAINABILITY DESIGN
             REQUIREMENTS?

             o Yes

             o No

E11.6A2-7   IS MIL-STD-471 SPECIFIED TO DESCRIBE THE
             MAINTAINABILITY DEMONSTRATION DETAILS AND
             METHODS?

             o Yes

             o No

E11.6A3   RAM ENGINEERING ANALYSIS

E11.6A3-1   IS TASK 204, "FAILURE MODES, EFFECTS, AND
             CRITICALITY ANALYSIS (FMECA)" OF MIL-STD-785B,
             PLUS MIL-STD-1629A, AND DI-R-7085A SPECIFIED
             TO IDENTIFY POTENTIAL DESIGN WEAKNESSES?

             o Yes

             o No

E11.6A3-2   IS THE FMECA SCHEDULED SO THAT THE DESIGN
             TRADE-OFFS REFLECT ANALYSIS CONCLUSIONS AND
             RECOMMENDATIONS?

             o Yes

             o No

E11.6A3-3   DOES THE FMECA IDENTIFY CATASTROPHIC AND
             CRITICAL FAILURE POSSIBILITIES REQUIRING
             ELIMINATION OR MINIMIZING BY DESIGN?

             o Yes

             o No

E11.6A3-4   ARE DESIGN FEATURES IDENTIFIED BY FMECA TO
             DETECT AND ISOLATE FAILURES OR IMPENDING
             FAILURES?

             o Yes

             o No

E11.6A3-5   ARE DESIGN REQUIREMENTS OR OPERATOR ACTIONS
             IDENTIFIED BY FMECA TO CIRCUMVENT OR MITIGATE
             FAILURE EFFECTS?

             o Yes

             o No

E11.6A3-6   IS TASK 205, "SNEAK CIRCUIT ANALYSIS", OF MIL-
             STD-785B SPECIFIED FOR COMPONENTS AND CIRCUITRY
             WHICH ARE CRITICAL TO MISSION SUCCESS AND SAFETY?

             o Yes
               - Consider the identification of latent paths
                 which cause occurrence of unwanted functions
                 or inhibit desired functions with all
                 components functioning properly.

             o No

E11.6A3-7   IS RELIABILITY CENTERED MAINTENANCE (RCM) ANALYSIS
             PER AMC-P 750-2 SPECIFIED TO IDENTIFY MAINTENANCE
             PROBLEM AREAS FOR REDESIGN CONSIDERATION?

             o Yes

             o No

E11.6A4   RAM ACCOUNTING ANALYSIS

E11.6A4-1   ARE QUANTITATIVE R&M REQUIREMENTS ESTABLISHED AND
             ALLOCATED, PREDICTED AND MEASURED BASED ON
             ACCOUNTING TASKS IN TABLE A-1, "APPLICATION
             MATRIX", OF MIL-STD-785B AND 470A?

             o Yes

             o No

E11.6A4-2   ARE R&M ALLOCATIONS AND PREDICTIONS FROM TASKS 202
             AND 203 BASED ON MATH MODELS FROM TASK 201 OF MIL-
             STDS-785B AND 470A TO APPORTION HIGHER ORDER
             REQUIREMENTS TO CONSTITUENT ELEMENTS?

             o Yes

             o No

E11.6A4-3   WHERE R&M PREDICTIONS INDICATE EQUIPMENT R&M
             CHARACTERISTICS THAT ARE SHORT OF REQUIREMENTS,
             IS CORRECTIVE ACTION IN DESIGN IDENTIFIED AND
             IMPLEMENTED?

             o Yes

             o No

E11.6A4-4   ARE MAINTAINABILITY ALLOCATIONS BASED ON
             RELIABILITY ALLOCATIONS AND FAILURE RATE
             ESTIMATES?

             o Yes

             o No

E11.6A4-5   HAVE ENGINEERING TESTS BEEN INCLUDED TO MEASURE
             R&M PARAMETERS THAT WILL DISCLOSE DEFICIENCIES IN
             SYSTEM DESIGN?

             o Yes

             o No

E11.6A4-6   DOES THE TEST PROGRAM EXAMINE MATERIEL AND
             WORKMANSHIP PRACTICES AND PROVIDE ASSURANCE THAT
             MINIMUM ACCEPTABLE R&M REQUIREMENTS HAVE BEEN MET?

             o Yes

             o No

E11.6A5   LIFE CYCLE RAM PLANNING

E11.6A5-1   ARE SYSTEM LEVEL R&M REQUIREMENTS AND CONSTRAINTS
             IDENTIFIED IN THE EARLY LIFE CYCLE PHASE?

             o Yes
                - Determine whether a RAM rationale report has
                  been prepared and coordinated in accordance
                  with TRADOC/AMC PAM 70-11.

             o No

E11.6A5-2   ARE QUANTITATIVE AND QUALITATIVE R&M REQUIREMENTS
             FOR SUBSYSTEMS AND COMPONENTS DIRECTLY RELATED OR
             TRACEABLE TO SYSTEM LEVEL REQUIREMENTS, AS WELL
             AS MISSION AND SAFETY REQUIREMENTS?

             o Yes

             o No

E11.6A5-3   IS THE SCHEDULE OF R&M ACHIEVEMENT MILESTONES AND
             MONITORING POINTS TIME-PHASED TO SUPPORT SYSTEM
             DESIGN AND WITH PROGRAM MILESTONES?

             o Yes

             o No

E11.6A5-4   IS MONITORING TO DETERMINE CONFORMANCE TO
             SPECIFIED REQUIREMENTS ACCOMPLISHED BY
             CONDUCTING INFORMAL AND FORMAL DESIGN REVIEWS,
             BY APPROVAL OF SUBMITTED DATA ITEMS, AND BY
             REVIEW OF PROGRESS REPORTS?

             o Yes

             o No

E11.6A5-5   ARE R&M ANALYSES INITIALLY PERFORMED PRIOR TO
             HARDWARE FABRICATION TO EFFECT DESIGN CHANGES WITH
             MINIMUM MODIFICATION COSTS?

             o Yes

             o No

E11.6A5-6   IS AN INITIAL SYSTEM LEVEL FMEA PERFORMED IN THE
             EARLY LC PHASE AND THEN CARRIED TO THE EQUIPMENT
             LEVEL IN SUBSEQUENT PHASES?

             o Yes

             o No

E11.6A5-7   IS A PARTS CONTROL AND APPLICATION PROGRAM
             INCLUDED TO INCREASE THE PROBABILITY OF
             ACHIEVING AND MAINTAINING INHERENT R&M AND
             MINIMIZING PARTS PROLIFERATION AND LOGISTICS .
             SUPPORT COSTS?

             o Yes

             o No

E11.6A5-8   ARE R&M DESIGN PROBLEMS OR POTENTIAL PROBLEMS
             REVEALED BY SPECIFIED ANALYSES AND DETECTED BY
             TECHNICAL TESTING?

             o Yes

             o No

E11.6A5-9   IS ACCEPTANCE AND FAILURE CRITERIA ESTABLISHED FOR
             R&M TESTING AND/OR DEMONSTRATIONS?

             o Yes

             o No

E11.6A5-10   ARE R&M PROGRAM AND DESIGN REVIEWS SCHEDULED TO
             PRECEDE IMPLEMENTATION OF THE DESIGN?

             o Yes

             o No

E11.6A5-11   DOES DESIGN REVIEW MATERIEL INCLUDE CURRENT
             ANALYSIS RESULTS WITH SUPPORTING DOCUMENTATION?

             o Yes

             o No

E11.6A5-12   ARE R&M PROGRAM PLANS PER TASK 101 OF MIL-STD-785B
             AND 470A SPECIFIED TO ESTABLISH TIME-PHASED R&M
             TASKS AND THE SCOPE OF EACH TASK?

             o Yes

             o No

E11.6A5-13   ARE TECHNICAL REVIEWS AND AUDITS SPECIFIED AS
              IDENTIFIED IN MIL-STD-1521?

              o Yes

              o No

E11.6A6   APPORTIONING

E11.6A6-1   ARE R&M MODELS IDENTIFIED FOR THE SYSTEM,
              SUBSYSTEM, AND EQUIPMENT FOR MAKING NUMERICAL
              APPORTIONMENTS AND ESTIMATES OF BASIC AND MISSION
              RELIABILITY AND MAINTAINABILITY PARAMETERS?

              o Yes

              o No

E11.6A6-2   ARE THE R&M ALLOCATIONS BASED ON MATH MODELS AND
              BLOCK DIAGRAMS AND DO THEY APPORTION HIGHER ORDER
              REQUIREMENTS TO CONSTITUENT ELEMENTS?

              o Yes

              o No

E11.6A6-3   DO MAINTAINABILITY ALLOCATIONS FOLLOW RELIABILITY
              ALLOCATIONS WITH RESULTANT FAILURE RATE ESTIMATES
              AS INPUTS?

              o Yes

              o No

E11.6A6-4   ARE TASKS 201, 202, AND 203 OF MIL-STDS-785B AND
              740A SPECIFIED TO CONDUCT R&M MODELING ALLOCATIONS
              AND PREDICTIONS?

              o Yes

              o No

E11.6A6-5   ARE R&M REQUIREMENTS INCLUDED IN SPECIFICATIONS
              WHICH ARE CONSISTENT WITH ALLOCATIONS TO LOWER
              INDENTURE LEVELS?

              o Yes

              o No

E11.6A6-6   HAVE THE TESTABILITY DESIGN OBJECTS, GOALS AND
              THRESHOLD FOR THE SYSTEM BEEN MET (E.G., ISOLATE
              TO A SINGLE LRV 90% OF THE TIME OR PERFORM SYSTEM
              CHECK WITHIN 30 SECONDS AFTER POWER UP)?

              o Yes
                - Identify the testability design objectives.
                - Discuss how each objective or goal has been
                  met.

              o No
                - Identify any design deficiencies that cause
                  the testability objectives not to be met.
                - Identify any technology advances which could
                  be exploited to improve the testability of
                  the system.

E11.6A6-7   WHAT ARE THE BIT, TEST EQUIPMENT, AND
              SUPPORTABILITY CONSTRAINTS OF THE NEW SYSTEM?

              o Explain the constraints that exist in each
                 area.

E11.6A6-8   HAVE ALTERNATE TESTABILITY CONCEPTS BEEN
              CONSIDERED AND TRADED-OFF?

              o Yes
                - What concepts were traded-off and what
                  criteria were used to make the decision to
                  select one concept over another?

              o No
                - Explain if developing alternative testability
                  concepts would improve system supportability.

E11.6A6-9   ARE (OR HAVE) TESTABILITY REQUIREMENTS BEEN
              DEMONSTRATED AND VERIFIED?

              o Yes
                - Did the Operating System detect the presence
                  of errors?
                - Discuss the ability of the system or subsystem
                  BIT to detect and isolate failures.
                - Discuss the compatibility of each UUT with
                  the selected test equipment.
                - Discuss the ability of the test equipment and
                  associated TPSs to detect and isolate
                  failures.

o No
   - Explain how the Operating System will be
     evaluated to detect the presence of errors.
   - Explain how the system/subsystem will be .
     evaluated to show: how BIT will detect and
     isolate failures; the compatibility of each
     UUT with the test equipment; the ability of
     the test equipment and TPSs to detect and
     isolate failures; and the compatibility of
     off-line test results with BIT detector and
     fault isolation of failed components.

E11.6A7   MAINTAINABILITY EVALUATION

E11.6A7-1   HAVE THE INHERENT OR BUILT-IN MAINTAINABILITY
             DESIGN REQUIREMENTS BEEN ADEQUATELY MET?

             o Yes

             o No

E11.6A7-2   HAS THE SYSTEM DESIGN FOR MAINTAINABILITY BEEN
             WELL THOUGHT OUT (E.G., USE OF MODULAR SUBSYSTEMS
             AND STANDARDIZATION OF PARTS) IN ORDER TO SIMPLIFY
             MAINTENANCE FUNCTIONS (E.G., REPAIR, ADJUST,
             REPLACE, CALIBRATE, ETC.) FOR ORGANIZATION AND
             INTERMEDIATE LEVEL MAINTAINERS?

             o Yes

             o No

E11.6A7-3   DOES THE DESIGN SUPPORT EASE OF ACCESS TO THE
             LOWEST REPLACEABLE ASSEMBLIES, ACCOMPLISHED WITHIN
             REASONABLE TIME USING COMMON TOOLS AND AVERAGE
             SKILLS?

             o Yes

             o No

E11.6A7-4   HAVE THE MINIMUM DOWNTIME REQUIREMENTS TO
             ACCOMPLISH MAINTENANCE ACTIONS BEEN MET?

             o Yes

             o No

E11.6A7-5   HAVE THE REQUIRED SKILL LEVELS TO PERFORM,
             ORGANIZATIONAL AND INTERMEDIATE LEVEL MAINTENANCE
             BEEN IDENTIFIED?

             o Yes

             o No

E11.6A7-6   HAVE ALL REQUIRED TOOLS, TMDE, EQUIPMENT AND
             FACILITIES BEEN IDENTIFIED AND VALIDATED?

             o Yes

             o No

E11.6A7-7   HAVE SAFETY CONSIDERATIONS BEEN MADE FOR ALL
             MAINTENANCE TASKS?

             o Yes

             o No

E11.6A7-8   HAVE THE NECESSARY CORRECTION FACTORS, ADJUSTMENT
             AND REDUNDANT ITEMS BEEN INCLUDED IN THE DESIGN
             IN ORDER TO REDUCE MAINTENANCE DOWNTIME?

             o Yes

             o No

E11.6A7-9   OVERALL, DOES THE MAINTAINABILITY EVALUATION
             ADEQUATELY TRANSLATE MAINTAINABILITY REQUIREMENTS
             AND ANTICIPATED OPERATIONAL CONSTRAINTS INTO
             PRACTICAL AND EFFECTIVE HARDWARE DESIGNS?

             o Yes

             o No

E11.7A1   DESIGN INFLUENCE INTERFACE

E11.7A1.1   DETERMINE   AND   EXPLAIN   THE   SUITABILITY   AND
             COMPLIANCE WITH INTERFACE REQUIREMENTS DESCRIBED
             IN THE LSA PLAN, TASK 102.

E11.7A2   INTERFACE TMDE & TEST EQUIPMENT

E11.7A2-1   COMMENT ON WHETHER THE SYSTEM AND SUPPORT CONCEPTS
WERE DEVELOPED TO MAXIMIZE USE OF SUPPORT AND TEST
EQUIPMENT ALREADY AVAILABLE IN THE TOE/TDA, ARMY
INVENTORY, OTHER SERVICES, OR THE COMMERCIAL
MARKET (IN DESCENDING ORDER OF DESIRABILITY).

E11.7A2-2   IF A SYSTEM-PECULIAR SUPPORT ITEM IS REQUIRED, HAS
APPROVAL BEEN OBTAINED FROM THE APPROPRIATE ARMY
ACTIVITY PRIOR TO INITIATING DEVELOPMENT?

o Yes

o No

E11.7A2-3   IS LSA TASK 202 SPECIFIED TO DEFINE SYSTEM DESIGN
CONSTRAINTS BASED ON EXISTING AND PLANNED LOGISTIC
SUPPORT RESOURCES AND SUPPORT STANDARDIZATION
CONSIDERATIONS?

o Yes

o No

E11.7A3   CRITICAL SUPPORT CHARACTERISTICS

E11.7A3-1   COMMENT ON WHETHER THERE ARE SUPPORTABILITY
PROBLEMS IDENTIFIED ON COMPARATIVE SYSTEMS FROM
LSA TASK 203 OF MIL-STD-1388-1A WHICH SHOULD BE
PREVENTED ON THE NEW SYSTEM/EQUIPMENT.

E11.7A3-2   ARE SUPPORTABILITY, COST, AND READINESS DRIVERS
ESTABLISHED FOR THE NEW SYSTEM FROM LSA TASK 203
BASED ON COMPARATIVE SYSTEMS/EQUIPMENT?

o Yes

o No

E11.7A3-3   ARE QUALITATIVE AND QUANTITATIVE SUPPORTABILITY
AND SUPPORTABILITY-RELATED DESIGN CONSTRAINTS
IDENTIFIED AND UPDATED FOR THE NEW SYSTEM FROM
LSA TASK 205?

o Yes

o No

E11.7A3-4   HAVE THE FUNCTIONAL REQUIREMENTS AND OPERATIONS
             AND MAINTENANCE TASK IDENTIFICATIONS FROM LSA TASK
             301 BEEN COMPLETED WITHOUT INDICATING DESIGN
             DEFICIENCIES THAT REQUIRE REDESIGN?

             o Yes

             o No

E11.7A3-5   DOES LSA TASK 303 SHOW THAT THERE ARE NO LIMITING
             CONSTRAINTS, CHARACTERISTICS, AND ENVIRONMENTS FOR
             EACH OF THE MODES OF TRANSPORTATION IDENTIFIED?

             o Yes

             o No

E11.7A3-6   ARE NEW OR CRITICAL LOGISTIC SUPPORT RESOURCES
             REQUIRED TO PERFORM OPERATION AND MAINTENANCE
             TASKS IDENTIFIED FROM LSA TASK 401?

             o Yes

             o No

E11.7A3-7   IS THE DESIGN OPTIMIZED WITHOUT THE NEED FOR
             IDENTIFYING ALTERNATIVES TO SIMPLIFY OPERATIONS
             AND MAINTENANCE TASKS OR TO BRING TASK
             REQUIREMENTS WITHIN ACCEPTABLE LEVELS?

             o Yes
               - Have design alternatives been considered to
                 resolve identified transportability problems?
               - Determine whether system/equipment
                 sectionalization to meet existing
                 transportation system capability has been
                 considered.

             o No

E11.7A3-8   IS DOCUMENTED INFORMATION VALIDATED BY
             DEMONSTRATION AND TESTS TO ASSESS THE ACHIEVEMENT
             OF SUPPORTABILITY REQUIREMENTS FROM LSA TASK 501?

             o Yes

             o No

E11.7A3-9   HAVE MODIFICATIONS TO HARDWARE OR SOFTWARE
             DEVELOPED TO CORRECT SUPPORTABILITY PROBLEMS
             UNCOVERED DURING TEST AND EVALUATION BEEN
             IMPLEMENTED AND VERIFIED THROUGH FURTHER TESTING?

             o Yes

             o No

E11.7A4   ILS CONSTRAINT ANALYSIS

E11.7A4-1   IS PROPER ATTENTION GIVEN TO EACH ILS ELEMENT AND
             AND HOW IT INTEGRATES WITH OTHERS IN ORDER TO
             ASSURE A FULLY SUPPORTABLE MATERIEL SYSTEM?

             o Yes

             o No

E11.7A4-2   ARE THE EFFECTS ON THE ESTABLISHED OR PLANNED
             TOTAL ARMY MANPOWER, PERSONNEL, TRAINING
             FACILITIES AND LOGISTICS SYSTEM CONSIDERED FOR
             PROPOSED AND/OR ESTABLISHED SYSTEM SUPPORT?

             o Yes

             o No

E11.7A4-3   ARE ILS CONSTRAINTS IDENTIFIED IN THE O&O PLAN,
             REQUIRED OPERATIONAL CAPABILITY (ROC) AND OTHER
             MATERIEL REQUIREMENT DOCUMENTS?

             o Yes

             o No

E11.7A4-4   IS THE LSA PROGRAM ESTABLISHED TO IDENTIFY ANY
             EXISTING OR PROPOSED SUPPORT STRUCTURE AND ANY
             ASSOCIATED CONSTRAINTS AS SUPPORT DESIGN
             INFLUENCE?

             o Yes

             o No

E11.7A4-5   DO DESIGN SOLUTIONS FORMULATED FOR OPERATIONS AND
             MAINTENANCE TASKS MEET ILS CONSTRAINTS?

             o Yes

             o No

E11.7A4-6   IS THE USE OF STANDARD ARMY, OTHER MILITARY
             SERVICES, OR ALLIED MATERIEL SYSTEMS, COMPONENTS,
             REPAIR PARTS, AND SUPPORT AND TEST EQUIPMENT
             EMPHASIZED?

             o Yes

             o No

E11.7A4-7   IS DESIGN, DEVELOPMENT, DELIVERY, INSTALLATION
             AND LOGISTIC SUPPORT OF REQUIRED TRAINING

E11.7A5 TRANSPORTABILITY INFLUENCE

E11.7A5-1   HAS THE SYSTEM BEEN DESIGNED TO MEET THE
             TRANSPORTABILITY REQUIREMENT FOR HIGHWAY, RAIL,
             MARINE, AIRCRAFT, AND TRANSPORT?

             o Yes
               - Which modes of transport are applicable?
               - Explain the test results that confirm that
                 the requirement has been met.

             o No
               - Explain the effect on meeting the
                 transportability requirement for the system
                 to fulfill its mission.
               - How will the inability of the system to be
                 transported in a designated mode be met?

E11.7A5-2   ARE TRANSPORTABILITY LIMITATIONS SUCH AS SIZE,
             SHAPE, AND WEIGHT CONSIDERED DURING SYSTEM
             DESIGN TO CONFORM TO MIL-STD-366 AND MIL-ADBX-
             157? (ALSO CONSIDER REQUIREMENTS FOR
             SECTIONALIZATION, SPECIAL HANDLING, AND
             TRANSPORT STORAGE AND SECURITY NEEDS)

             o Yes

             o No

E11.7A5-3   IS THE SYSTEM DESIGN IN ITS SHIPPING
             CONFIGURATION SUITABLE FOR MOVEMENT TO
             THE ULTIMATE DESTINATION VIA AVAILABLE
             AND AUTHORIZED TRANSPORTATION MODES?

             o Yes

             o No

E11.7A5-4   HAS THE SYSTEM BEEN DESIGNED TO MEET THE
             SECTIONALIZATION AND DISASSEMBLY REQUIREMENTS
             OF AR 70-47?

             o Yes

             o No
               - Explain how the design must be changed to
                 meet those requirements.

E11.7A5-5   HAVE LOAD, TIEDOWN, SUSPENSION, AND EXTRACTOR
             REQUIREMENTS BEEN MET?

             o Yes

             o No

E11.7A6 FACILITIES INFLUENCE

E11.7A6-1   IS THE DESCRIPTION OF EXISTING OPERATING AND
             SUPPORT FACILITIES CHARACTERISTICS AND
             AVAILABILITY AT THE PROJECTED SYSTEM DEPLOYMENT
             LOCATIONS PROVIDED TO THE CONTRACTOR TO
             INFLUENCE SYSTEM DESIGN?

             o Yes

             o No

E11.7A6-2   HAVE NEW OR MODIFIED OPERATIONAL OR SUPPORT
             FACILITY REQUIREMENTS BEEN IDENTIFIED?

             o Yes

             o No

E11.7A6-3   HAVE ALL POTENTIAL DESIGN TRADE-OFFS TO MINIMIZE
THE NEED FOR THESE FACILITIES BEEN INVESTIGATED
AND THE OPTIMUM DESIGN SELECTED?

      o Yes

      o No

E11.8   ASSESS ECONOMICS INFLUENCE ON DESIGN

E11.8A1 IDENTIFY AREAS OF ECONOMIC INFLUENCE

E11.8A1-1   HAVE ALL AREAS OF ECONOMIC INFLUENCE ON DESIGN,
INCLUDING COST AND PERFORMANCE FACTORS BEEN
CONSIDERED? (COST FACTORS INCLUDE INVENTORY
SUPPORT AND TEST EQUIPMENT, SPACE REQUIREMENTS,
LABOR TRAINING, SPARE PARTS AND DOCUMENTATION
SUCH AS TECHNICAL MANUALS. PERFORMANCE FACTORS
TO QUANTITATIVE RAM PARAMETERS.)

      o Yes

      o No

E11.8A2 PROGRAM FUNDING

E11.8A2-1   DO THE PROGRAM MANAGEMENT DOCUMENTS CONTAIN
FUNDING INFORMATION WHICH HAS BEEN UPDATED
THROUGHOUT THE PHASES OF THE MATERIEL
ACQUISITION PROCESS?

      o Yes

      o No

E11.8A2-2   DOES THE SYSTEM CONCEPT PAPER (SCP), WHICH IS
THE DECISION DOCUMENT PREPARED FOR MILESTONE
I, INCLUDE RESULTS OF COST-EFFECTIVENESS
ANALYSIS FOR ALTERNATIVES CONSIDERED AND VERIFY
THAT THE SELECTED ALTERNATIVE IS AFFORDABLE?

      o Yes

      o No

E11.8A2-3   DOES THE DECISION COORDINATING PAPER (DCP),
             WHICH IS PREPARED FOR MILESTONEs II & III,
             SUMMARIZE THE SAME AREAS AS IN THE SCP PLUS,
             AT MILESTONE II, VERIFY THAT FUTURE COST AND
             SCHEDULE ARE DEFINED IN DETAIL AND ARE
             CREDIBLE?

             o Yes

             o No

E11.8A2-4   DOES THE ILS PLAN (ILSP) AND SOLICITATION
             DOCUMENTS DESCRIBE HOW ILS INCLUDING LIFE CYCLE
             COST WILL INFLUENCE MATERIEL DESIGN AND DECISIONS
             WITHIN THE "DESIGN INFLUENCE" ILS ELEMENT PLAN?

             o Yes

             o No

E11.8A2-5   ARE ILS-RELATED LIFE CYCLE FUNDING REQUIREMENTS
             IDENTIFIED UNDER "SUPPORT RESOURCE FUNDS" OF ILS
             ELEMENT PLANS?

             o Yes
               - Determine the funded and unfunded ILS element.
               - What ILS element funding shortfalls exist?

             o No

E11.8A2-6   DOES LSA TASK 101 OF MIL-STD-1388-1A INCLUDE
             A COST ESTIMATE TO PERFORM EACH PROPOSED
             LSA TASK AND SUBTASK AND THEIR COST
             EFFECTIVENESS?

             o Yes

             o No

E11.8A3   LCC INFLUENCE

E11.8A3-1   DOES THE SYSTEM LIFE CYCLE COST (LCC) INCLUDE THE
             REQUIRED THREE PROGRAM COST CATEGORIES FOR TOTAL
             COST OF OWNERSHIP? [RESEARCH AND DEVELOPMENT (R&D)
             INVESTMENT, OPERATION AND SUPPORT (O&S)]

             o Yes

             o No

E11.8A3-2   DO R&D COSTS INCLUDE ENGINEERING DESIGN, ANALYSIS, DEVELOPMENT, TEST, EVALUATION AND MANAGEMENT EFFORTS FOR RESULTANT PRODUCTS TO BRING A MATERIEL SYSTEM FROM CONCEPT TO PRODUCTION?

                o Yes

                o No

E11.8A3-3   DO INVESTMENT COSTS INCLUDE PRODUCTS AND SERVICES NECESSARY TO TRANSFORM THE RESULTS OF R&D INTO A FULLY OPERATIONAL SYSTEM CONSISTING OF THE HARDWARE, TRAINING, AND SUPPORT ACTIVITIES NECESSARY TO INSTITUTE OPERATIONS?

                o Yes

                o No

E11.8A3-4   DO O&S COSTS INCLUDE THOSE COSTS RESULTING FROM THE OPERATION, MAINTENANCE, AND CONSUMPTION OF MATERIALS AND SUPPLIES OF A SYSTEM AFTER IT BECOMES A PART OF THE INVENTORY?

                o Yes

                o No

E11.8A3-5   DOES THE BASELINE COST ESTIMATE (BCE) ADDRESS THE COST OF ACQUISITION PLUS OWNERSHIP (INCLUDING OPERATING COSTS) AND SPECIFY DESIRED UNIT COSTS FOR USE IN ESTIMATING COST PARAMETERS AND ESTABLISHING DESIGN-TO-UNIT PRODUCTION COST GOALS?

                o Yes

                o No

E11.8A3-6   DOES THE BCE AND CURRENT ESTIMATES INCLUDE COSTS FOR ILS ELEMENTS REQUIRED FOR THE SYSTEM?

                o Yes

                o No

E11.8A3-7   ARE COST-EFFECTIVENESS ANALYSIS CONDUCTED
             FOR SUPPORT ALTERNATIVES AND LCC ESTIMATES
             DEVELOPED FOR TRADE-OFF ALTERNATIVES?

             o Yes

             o No

E11.8A4   O&S COST REDUCTION INFLUENCE

E11.8A4-1   ARE READINESS AND SUPPORT COST DRIVERS
             IDENTIFIED EARLY IN THE PROGRAM WITH COST AND
             READINESS IMPROVEMENT TARGETS BY LSA TASKS
             203, AND 204 OF MIL-STD-1388-IA?

             o Yes

             o No

E11.8A4-2   ARE COST AND SUPPORT TREATED AS EQUAL
             CONSIDERATIONS WITH PERFORMANCE AND SCHEDULE?

             o Yes

             o No

E11.8A4-3   ARE ILS INITIATIVES BEING FUNDED TO REDUCE O&S
             COSTS THROUGH RAM-D IMPROVEMENTS IN THE SYSTEM
             TO IMPROVE/REDUCE ITS SUPPORT STRUCTURE?

             o Yes

             o No

E11.8A4-4   FOR SYSTEMS INVOLVING SOLDIERS AND MACHINES, IS
             THE COST OF PERSONNEL RESOURCES AND TRAINING
             INCLUDED IN CONSIDERATIONS OF ALTERNATE SYSTEMS
             AND FOR THE SELECTED SYSTEM DURING SUBSEQUENT
             STAGES?

             o Yes

             o No

E11.8A4-5   HAVE SYSTEM DESIGN ALTERNATIVES BEEN CONSIDERED
             THAT REALIZE O&S COST SAVINGS THROUGH MANPRINT-
             DRIVEN ENGINEERING DESIGN FEATURES THAT REDUCE
             SUPPORT DEMANDS, INCLUDING MANPOWER, PERSONNEL,
             OR TRAINING REQUIREMENTS?

             o Yes

             o No

E11.8A4-6   ARE DESIGN CONSTRAINTS DEVELOPED FOR IDENTIFIED
             EXISTING AND PLANNED LOGISTIC SUPPORT RESOURCES
             HAVING POTENTIAL STANDARDIZATION BENEFITS BY
             IMPOSITION OF LSA TASK 202 OF MIL-STD-1388-1A?

             o Yes

             o No

E11.8A4-7   ARE OPERATION AND MAINTENANCE FUNCTIONS WHICH
             ARE SUPPORTABILITY, COST, AND READINESS DRIVERS
             IDENTIFIED BY LSA TASK 301 OF MIL-STD-1388-1A?

             o Yes
               - Determine whether there are adequate plans
                 for system redesign to reduce the need for
                 these functions.

             o No

E11.8A4-8   ARE DESIGN DEFICIENCIES BASED ON OPERATIONS AND
             MAINTENANCE FUNCTIONS AND TASKS IDENTIFIED
             TOGETHER WITH CORRECTING DESIGN ALTERNATIVES
             WHICH REDUCE LOGISTIC SUPPORT RESOURCE
             REQUIREMENTS BY LSA TASK 301?

             o Yes

             o No

E11.8A5   DESIGN FOR DISCARD

E11.8A5-1   DOES SYSTEM DESIGN FACILITATE A MAINTENANCE
             POLICY TO ACCOMPLISH CORRECTIVE MAINTENANCE BELOW
             DEPOT LEVEL PRIMARILY BY REPLACEMENT OF MODULES
             (COMPONENTS AND ASSEMBLIES) RATHER THAN
             PIECE/PARTS?

             o Yes

             o No

E11.8A5-2   FOR ITEMS THAT ARE NONREPAIRABLE, BUT REPLACED
             BY A LIKE SPARE, DOES THE DESIGN PROVIDE A
             RELIABLE POSITIVE SELF-TEST CAPABILITY TO
             ELIMINATE REQUIREMENTS FOR ANCILLARY TEST
             EQUIPMENT AND INSURE THAT GOOD UNITS ARE
             NOT DISCARDED?

             o Yes

             o No

E11.8A5-3   DOES THE NONREPAIRABLE ITEM DESIGN INCORPORATE
             HERMETIC SEALING OR ENCAPSULATION OF ALL ITEM
             COMPONENTS TO IMPROVE RELIABILITY AND PROTECT
             AGAINST HUMIDITY AND CORROSION?

             o Yes

             o No

E11.8A5-4   WHEN AN ASSEMBLY IS REPARABLE BY REMOVAL AND
             REPLACEMENT OF SUBASSEMBLIES ARE THE
             SUBASSEMBLIES DESIGNED AS THROWAWAY ITEMS?

             o Yes

             o No

E11.8A5-5   ARE SELECTED ITEMS SUBJECTED TO A LEVEL OF
             REPAIR ANALYSIS (LORA) AS EARLY AS POSSIBLE IN
             THE ACQUISITION PROGRAM TO ISOLATE ITEMS WHICH
             SHOULD CLEARLY BE DESIGNED FOR DISCARD FROM
             THOSE THAT MAY BE DESIGNED FOR REPAIR?

             o Yes

             o No

E11.8A6   LORA

E11.8A6-1   IS A LORA PROGRAM SPECIFIED BY IMPOSITION OF
                 LSA SUBTASK 303.2.7 OF MIL-STD-1388-1A OR
                 AMC-R 700-27 (LEVEL OF REPAIR ANALYSIS (LORA)
                 PROGRAM) DURING EACH PHASE OF THE MATERIEL
                 ACQUISITION TO EVOLVE A DESIGN THAT CONSIDERS
                 THE ECONOMIC AND NON-ECONOMIC FACTORS OF
                 SUPPORT ALTERNATIVES?

                 o Yes

                 o No

E11.8A6-2   ARE ONLY APPROVED LORA MODELS/TECHNIQUES
                 UTILIZED FOR CONDUCTING LORA EVALUATIONS?

                 o Yes

                 o No

E11.8A6-3   DOES THE LORA PROGRAM PLAN INDICATE TIME
                 PHASING AND THE COORDINATION WITH RELATED
                 ELEMENTS OF THE OVERALL SYSTEM ENGINEERING
                 EFFORT?

                 o Yes

                 o No

E11.8A6-4   IS A LORA REPORT SPECIFIED TO DOCUMENT AND
                 SUPPORT RECOMMENDATIONS FOR REPAIR LEVEL AND
                 DISCARD DETERMINATION WITH RATIONALE FOR THE
                 DECISION?

                 o Yes

                 o No

E11.8A6-5   ARE LORA EVALUATIONS BASED ON ECONOMIC
                 CONSIDERATIONS INCLUDING COST AND PERFORMANCE
                 FACTORS IN USING A LORA MODEL AS WELL AS
                 NON-ECONOMIC CONSIDERATIONS SUCH AS SAFETY
                 AND DESIGN CONSTRAINTS FOR LEVEL OF
                 REPAIR/DISCARD DECISIONS?

                 o Yes

                 o No

E11.8A7   ENERGY REQUIREMENTS

E11.8A7-1   IS LSA SUBTASK 303.2.10. OF MIL-STD-1388-1A
                SPECIFIED TO CONDUCT EVALUATIONS AND TRADEOFFS
                BETWEEN SYSTEM/EQUIPMENT ALTERNATIVES AND
                ENERGY REQUIREMENTS?

                o Yes
                  - Determine if conduct of sensitivity analysis
                    on POL costs is included.

                o No

E11.8A7-2   WAS ENERGY COST DETERMINED TO BE A PRIME COST
                DRIVER FROM COMPARATIVE SYSTEMS?

                o Yes

                o No

E11.8A7-3   DOD ENERGY COST REPRESENT A DRIVER FOR THE NEW
                SYSTEM/EQUIPMENT?

                o Yes

                o No

E11.8A7-4   ARE APPLICABLE ENERGY RELATED DESIGN CONSTRAINTS
                ESTABLISHED BASED ON POL RESOURCES THAT WILL BE
                AVAILABLE WHEN THE NEW SYSTEM/EQUIPMENT IS
                FIELDED?

                o Yes

                o No

E11.8A7-5   IS SUFFICIENT TESTING PLANNED TO VERIFY
                ACHIEVEMENT OF THESE CONSTRAINTS?

                o Yes

                o No

E11.8A7-6   .   HAVE CONSTRAINTS BEEN MET OR APPROPRIATE
                CORRECTIVE ACTION PLANNED?

                o Yes

                o No

E11.8A8   TRADE OFF ANALYSES

E11.8A8-1   ARE TRADE-OFF ANALYSES CONDUCTED TO DETERMINE
                THE OPTIMUM BALANCE BETWEEN SYSTEM COST,
                SCHEDULE, PERFORMANCE, AND SUPPORTABILITY?

                o Yes

                o No

E11.8A8-2   IS LSA TASK 303 OF MIL-STD-1388-1A SPECIFIED AS
                A FACTOR IN ALTERNATIVE SYSTEM TRADE-OFFS
                TO DETERMINE THE BEST APPROACH FOR SUPPORT,
                DESIGN AND OPERATION to SATISFIES THE SYSTEM
                NEED?

                o Yes

                o No

E11.8A8-3   ARE TRADE-OFFS CONDUCTED BETWEEN SUPPORT SYSTEM
                ALTERNATIVES IDENTIFIED FOR EACH SYSTEM/
                EQUIPMENT ALTERNATIVE TO IDENTIFY ANY NEW OR
                CRITICAL LOGISTIC SUPPORT RESOURCE REQUIREMENTS?

                o Yes

                o No

E11.8A8-4   ARE OPTIMUM TRAINING REQUIREMENTS AND DIAGNOSTIC
                CONCEPTS PROVIDED FROM TOA'S BY IMPOSITION OF
                LSA SUBTASKS 303.2.6. AND 303.2.8 OF MIL-STD-
                1388 IA?

                o Yes

                o No

E11.8A8-5   ARE RESULTS OF TOAs BETWEEN SYSTEM/EQUIPMENT
                ALTERNATIVES AND ENERGY REQUIREMENTS,
                SURVIVABILITY AND BATTLE DAMAGE REPAIR
                CHARACTERISTICS, AND TRANSPORTABILITY
                REQUIREMENTS AVAILABLE BY IMPOSITION OF LSA
                SUBTASKS 303.2.10, .11, & .12 OF MIL-STD-1388-1A?

                o Yes

                o No

E11.8A8-6   ARE TRADE-OFFS CONDUCTED IN INITIAL PHASES OF
             MATERIAL ACQUISITION BETWEEN SYSTEM
             CHARACTERISTICS AND SUPPORT CONCEPTS TO MEET
             PEACETIME READINESS AND WARTIME EMPLOYMENT
             OBJECTIVES AND TO ESTABLISH FIRM GOALS AND
             THRESHOLDS FOR SUPPORT AND RAM PARAMETERS?

             o Yes

             o No

E11.8A8-7   ARE TRADEOFFS BETWEEN DESIGN, RAM, MANPOWER
             AND OTHER SUPPORT-RELATED GOALS CONDUCTED TO
             CONFIRM THE SYSTEM OPERATIONAL AND SUPPORT
             CONCEPT DURING FULL SCALE DEVELOPMENT OR
             EQUIVALENT PHASE?

             o Yes

             o No

E11.8A8-8   ARE DESIGN, OPERATIONAL, AND SUPPORT OBJECTIVES
             (WHICH ARE QUALITATIVE OR QUANTITATIVE VALUES
             OR RANGE OF VALUES WHICH REPRESENT DESIRABLE
             LEVELS OF PERFORMANCE) USED AS TRADEOFFS TO
             OPTIMIZE SYSTEM REQUIREMENTS?

             o Yes

             o No

E11.9   ASSESS PROGRAM PROCEDURE INFLUENCE

E11.9A1   PROGRAM PHASED INFLUENCE AREAS

E11.9A1-1   ARE ILS DESIGN RELATED AND MANPRINT REQUIREMENTS
             AND CONSIDERATIONS INCLUDED IN SOLICITATION
             DOCUMENTS, SOURCE SELECTION PROCEDURES AND
             CONTRACTS?

             o Yes

             o No

E11.9A1-2   ARE ILS AND MANPRINT REQUIREMENTS AND
             CONSIDERATIONS INCLUDED IN THE REVIEW AND
             EVALUATION OF CONTRACTOR PRODUCTS AND
             PERFORMANCE DURING THE SYSTEM ACQUISITION
             PROCESS?

             o Yes

             o No

E11.9A1-3   DO SOLICITATION DOCUMENTS AND CONTRACTS
             MANAGEMENT EFFORTS (WITHIN THE ILS PROGRAM
             FOR INTEGRATED DEVELOPMENT OF ILS ELEMENTS WITH
             MANPRINT) INFLUENCE SYSTEM DESIGN?

             o Yes

             o No

E11.9A1-4   IS THE CONTRACTOR'S INTEGRATED SUPPORT PLAN (ISP)
             MAINTAINED IN CURRENT STATUS BY PERIODIC UPDATES?

             o Yes
               - Indicate whether it is used to measure the
                 contractor's performance.

             o No

E11.9A1-5   IS LSA STRATEGY (WHICH IDENTIFIES LSA TASKS
             AND SUBTASKS TO MAXIMIZE DESIGN INFLUENCE)
             AVAILABLE BEFORE PREPARING SOLICITATION
             DOCUMENTS?

             o Yes
               - Determine if in the updates, the LSA strategy
                 summarizes accomplished LSA task outputs and
                 projects the LSA task requirements for
                 succeeding program phases.

             o No

E11.9A1-6   IS MIL-HDBK-245B [PREPARATION OF STATEMENT OF
             WORK (SOW)] UTILIZED FOR PREPARATION OF THE
             APPLICABLE TYPE OF SOW FOR INCLUSION IN
             SOLICITATION AND CONTRACT DOCUMENTS?

             o Yes

             o No

E11.9A1-7   DOES THE SOW EXPRESS IN DISCERNIBLE EVENTS,
             ACTIVITIES, PRODUCTS, ETC., WHAT THE CONTRACTOR
             IS TO DO AND CAN PROVIDE, WHICH CAN BE
             MONITORED TO ENSURE THAT ITS REQUIREMENTS ARE
             BEING MET?

             o Yes

             o No

E11.9A1-8   IS MIL-STD-490,"SPECIFICATION PRACTICES,"
             UTILIZED FOR PREPARATION OF THE APPLICABLE
             TYPE OF SPECIFICATION?

             o Yes

             o No

E11.9A1-9   DOES SECTION L OF MIL-STD-490, INSTRUCTION AND
             CONDITIONS AND NOTICES TO OFFERORS/QUOTERS OF
             THE REQUEST FOR PROPOSAL (RFP), INCLUDE
             REQUIREMENTS FOR A LOGISTICS PROPOSAL AS A PART
             OF THE INSTRUCTIONS FOR PROPOSAL PREPARATION?

             o Yes

             o No

E11.9A2 STATEMENT OF WORK

E11.9A2-1   IS MIL-HDBK-245B UTILIZED AS GUIDANCE IN THE
             PREPARATION OF THE SOW?

             o Yes

             o No

E11.9A2-2   DOES THE SOW ESTABLISH AND DEFINE ALL NON-
             SPECIFICATION REQUIREMENTS FOR CONTRACTOR
             EFFORTS WITH QUALITATIVE AND QUANTITATIVE
             DESIGN AND PERFORMANCE REQUIREMENTS INCLUDED
             IN THE SPECIFICATION?

             o Yes

             o No

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E11.9A2-3   DOES THE TEXT OF THE SOW TASKS IDENTIFY ONLY
                 THE WORK EFFORT TO BE PERFORMED AND NOT INCLUDE
                 THE DESCRIPTION AND DELIVERY REQUIREMENTS FOR
                 DATA WHICH CAN ONLY BE DEFINED AND SCHEDULED
                 THROUGH THE USE OF THE CDRL, DD FORM 1423
                 IN CONJUNCTION WITH THE INCORPORATION OF THE
                 APPROPRIATE DATA ITEM DESCRIPTION (DID), DD FORM
                 1664?

                 o Yes

                 o No

E11.9A2-4   IS THE CDRL USED ONLY TO LIST AND ORDER THE
                 CONTRACT DATA REQUIRED, AND THE DID USED TO
                 DESCRIBE THE DATA AND PRESCRIBE THE PREPARATION
                 INSTRUCTIONS IN TERMS OF FORMAT AND
                 ARRANGEMENT?

                 o Yes

                 o No

E11.9A2-5   COMMENT ON HOW THE PROPOSER INTENDS TO MEET THE
                 REQUIREMENTS AS ESTABLISHED WHETHER CONTAINED IN
                 A SEPARATE DOCUMENT OR INCLUDED IN THE SOW.

E11.9A2-6   DOES THE SOW SPECIFICALLY DEFINE THE LIMITATIONS
                 OF THE APPROPRIATE MILITARY STANDARDS OR MILITARY
                 SPECIFICATIONS THAT ARE INVOKED?

                 o Yes

                 o No

E11.9A3   SPECIFICATIONS

E11.9A3-1   HAS MIL-STD-490, "SPECIFICATIONS PRACTICES,"
                 BEEN UTILIZED FOR CONTENT DEFINITION OF TYPE A,
                 SYSTEM SPECIFICATION AND/OR TYPE B1, PRIME ITEM
                 DEVELOPMENT SPECIFICATION?

                 o Yes

                 o No

E11.9A3-2   HAVE SYSTEM/ITEM DEFINITION WHICH TRANSLATES
              OPERATIONAL REQUIREMENTS INTO EEQUIPMENT
              DEVELOPMENTAL TASKS BEEN INCLUDED IN SECTIONS 3 &
              4 OF THE SPECIFICATION?

              o Yes

              o No

E11.9A3-3   WERE PERFORMANCE CHARACTERISTICS WHICH DESCRIBE
              WHAT THE SYSTEM/ITEM SHOULD DO (INCLUDING BOTH
              BOTH UPPER AND LOWER PERFORMANCE LIMITS)
              INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

              o Yes

              o No

E11.9A3-4   WERE PHYSICAL CHARACTERISTICS (WEIGHT AND SIZE
              LIMITATIONS, TRANSPORT AND STORAGE REQUIREMENTS,
              DURABILITY AND VULNERABILITY FACTORS, AND HEALTH,
              SAFETY AND SECURITY CRITERIA) BEEN INCLUDED IN
              SECTIONS 3 & 4 OF THE SPECIFICATION?

              o Yes

              o No

E11.9A3-5   HAVE   RELIABILITY   REQUIREMENTS   STATED   IN
              QUANTITATIVE   TERMS   (I.E.,   A   RELIABILITY
              APPORTIONMENT MODEL TO SUPPORT APPORTIONMENT OF
              RELIABILITY VALUES ASSIGNED TO FUNCTIONAL AREAS
              OR MAJOR COMPONENTS FOR THEIR SHARE IN ACHIEVING
              DESIRED SYSTEM OR ITEM RELIABILITY) BEEN INCLUDED
              IN SECTIONS 3 & 4 OF THE SPECIFICATION?

              o Yes

              o No

E11.9A3-6   WERE MAINTAINABILITY REQUIREMENTS IN QUANTITATIVE
              TERMS AS THEY APPLY TO MAINTENANCE IN THE PLANNED
              MAINTENANCE AND SUPPORT ENVIRONMENT BEEN INCLUDED
              IN SECTIONS 3 & 4 OF THE SPECIFICATION?
              (MAINTAINABILITY REQUIREMENTS SHOULD INCLUDE TIME
              AND RATE FACTORS AND MAINTENANCE COMPLEXITY SUCH
              NUMBER OF PEOPLE, AND SKILL LEVELS AND VARIETY OF
              SUPPORT EQUIPMENT. TIME FACTORS INCLUDE MEAN AND
              MAXIMUM DOWNTIME, MEAN AND MAXIMUM TIME TO REPAIR,

AND MEAN TIME BETWEEN MAINTENANCE ACTIONS. RATE
FACTORS INCLUDE MAINTENANCE MANEUVERS PER SPECIFIC
MAINTENANCE ACTION, MAINTENANCE HOURS AND
FREQUENCY HOURS, AND FREQUENCY OF PREVENTATIVE
MAINTENANCE.)

o Yes

o No

E11.9A3-7   WERE ENVIRONMENTAL CONDITIONS, BOTH NATURAL AND
INDUCED, DURING OPERATION, STORAGE, AND SHIPMENT
INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?
FACTORS SUCH AS CLIMATE, VIBRATION, NOISE, AND
NOXIOUS FUMES SHOULD ALSO BE INCLUDED.

o Yes

o No

E11.9A3-8   WERE TRANSPORTABILITY REQUIREMENTS TO PERMIT
DEPLOYMENT, EMPLOYMENT, AND LOGISTIC SUPPORT
INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-9   WERE DESIGN AND CONSTRUCTION REQUIREMENTS
SPECIFIED BY ESTABLISHED MILITARY STANDARDS AND
SPECIFICATIONS INCLUDED IN SECTIONS 3 & 4 OF
THE SPECIFICATION?

o Yes

o No

E11.9A3-10   WERE SYSTEM/ITEM REQUIREMENTS FOR USE OF
MATERIALS, PARTS, AND PROCESSES IN THE DESIGN
(INCLUDING QUALIFIED STANDARD AND COMMERCIAL
PARTS) INCLUDED IN SECTIONS 3 & 4 OF THE
SPECIFICATION?

o Yes

o No

E11.9A3-11   WERE ELECTROMAGNETIC RADIATION REQUIREMENTS, (INCLUDING OPERATING ENVIRONMENT AND THAT WHICH IT GENERATES) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-12   WERE NAME PLATES AND IDENTIFYING MARKING REQUIREMENTS FOR SYSTEM, EQUIPMENT AND PARTS WITH APPLICABLE EXISTING STANDARDS ON CONTENT AND APPLICATION INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-13   WERE SAFETY REQUIREMENTS TO PRECLUDE OR LIMIT HAZARDS TO PERSONNEL AND EQUIPMENT IMPOSED BY CITING STABLISHED STANDARDS INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION? INCLUDE REQUIREMENTS FOR SUPPORT EQUIPMENT AND FOR ASSEMBLY, DISASSEMBLY, TEST, TRANSPORT, STORAGE, OPERATION AND MAINTENANCE. ALSO INCLUDE FAIL-SAFE AND EMERGENCY OPERATING RESTRICTIONS REQUIRED TO PREVENT INJURY OR TO PROVIDE FOR RECOVERY IN THE EVENT OF FAILURE, AS WELL AS ELECTRICAL SYSTEM GROUNDING, GAS DETECTION AND WARNING DEVICES, CLEANLINESS AND DECONTAMINATION.

o Yes

o No

E11.9A3-14   WERE HUMAN ENGINEERING REQUIREMENTS WITH APPLICABLE MIL-STD BY REFERENCES AND CONSTRAINTS ON ALLOCATION OF FUNCTIONS TO PERSONNEL AND PERSONNEL/EQUIPMENT INTERACTIONS INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-15   WERE INTERCHANGEABILITY REQUIREMENTS FOR SYSTEM EQUIPMENT OR COMPONENTS AS A CONDITION OF DESIGN INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-16   WERE SYSTEM AND ITEM DOCUMENTATION REQUIREMENTS (I.E., TECHNICAL MANUALS AND INSTALLATION INSTRUCTIONS) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-17   WERE MAINTENANCE CONSIDERATIONS (INCLUDING USE OF MULTIPURPOSE TEST EQUIPMENT, REPAIR VERSUS DISCARD CRITERIA, ORGANIZATIONAL LEVELS OF MAINTENANCE, AND REPAIR CYCLES, AND ACCESSIBILITY) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-18   WERE SUPPLY SYSTEM CONSIDERATIONS WHICH INFLUENCE DESIGN (I.E., INTRODUCTION OF NEW ITEMS INTO THE SUPPLY SYSTEM, SUPPLY AND RESUPPLY METHODS, DISTRIBUTION AND LOCATION OF SYSTEM AND ITEM STOCKS) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-19   WERE FACILITIES, FACILITY EQUIPMENT, AND ANCILLARY EQUIPMENT IMPACT AND REQUIREMENTS TO SUPPORT THE SYSTEM OR ITEM INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-20   WERE PERSONNEL REQUIREMENTS WHICH MUST BE INTEGRATED INTO THE DESIGN (I.E., NUMBER AND SKILL LEVELS FOR OPERATING AND MAINTENANCE PERSONNEL AND PERSONNEL RESOURCES EXPECTED TO BE AVAILABLE FOR TRAINING ON THE SYSTEM OR ITEM) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-21   WERE TRAINING REQUIREMENTS (INCLUDING TRAINING EQUIPMENT, TRAINING DEVICES, TRAINING TIME AND LOCATIONS, AND COURSE MATERIAL AND TRAINING AIDS TO SUPPORT THE SPECIFIED TRAINING) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-22   WERE FUNCTIONAL AREA OR MAJOR COMPONENT PERFORMANCE AND PHYSICAL CHARACTERISTICS, (I.E., PARAMETERS, PHYSICAL INTERFACES) INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?

o Yes

o No

E11.9A3-23   WERE ORDER OF PRECEDENCE OF REQUIREMENTS OR WEIGHT ASSIGNMENTS TO INDICATE RELATIVE IMPORTANCE OF CHARACTERISTICS AND OTHER REQUIREMENTS INCLUDED IN SECTIONS 3 & 4 OF THE SPECIFICATION?
ALSO THE ESTABLISHMENT OF ORDER OF PRECEDENCE OF SPECIFICATION RELATIVE TO REFERENCED DOCUMENTS SHOULD BE INCLUDED.

o Yes

o No

E11.9A3-24   DOES SECTION 4 OF THE SYSTEM AND/OR DEVELOPMENT
              SPECIFICATION COVER REQUIREMENTS FOR FORMAL
              TESTS/VERIFICATIONS OF SYSTEM OR ITEM
              PERFORMANCE, DESIGN CHARACTERISTICS
              AND OPERABILITY?

              o Yes

              o No

E11.9A3-25   ARE RELIABILITY TESTS, ENGINEERING TESTS,
              QUALIFICATION TESTS, AND INSTALLATION TESTS AND
              CHECKOUTS INCLUDED AS WELL AS FORMAL TEST
              VERIFICATION OF PERFORMANCE CHARACTERISTICS?

              o Yes

              o No

E11.9A3-26   ARE PREPARATION FOR DELIVERY REQUIREMENTS FOR
              EQUIPMENT INCLUDED IN SECTION 5 OF THE
              SPECIFICATIONS BY REFERENCING APPROPRIATE
              MILITARY SPECIFICATIONS AND STANDARDS AS WELL
              AS ANY NON-STANDARD PRACTICES PECULIAR TO THE
              SYSTEM OR THE ITEM?

              o Yes

              o No

E11.9A4   CONTRACTOR INCENTIVES

E11.9A4-1   DOES THE SOW CLEARLY DEFINE THE DESIRED WORK
              EFFORT TO BE PERFORMED AND ACCOMPLISHED
              EXPRESSED AS MINIMUM NEEDS WITHIN THE SCOPE OF
              OUTER LIMITS OF THE CONTRACTOR'S EFFECTIVENESS?

              o Yes

              o No

E11.9A4-2   IS THE SOW DESCRIPTION OF THE WORK DEFINITE
              ENOUGH FOR CONTRACT ENFORCEMENT YET BROAD
              ENOUGH TO ALLOW FOR THE CONTRACTOR'S CREATIVE
              EFFORT TO ENHANCE THE PROGRAM?

              o Yes

              o No

E11.9A4-3   ARE SOW REQUIREMENTS, OBJECTIVES AND GOALS
            CLEARLY WRITTEN IN ORDINARY LANGUAGE WHICH
            ALLOWS ONLY ONE INTERPRETATION WITH ESSENTIAL
            TECHNICAL LANGUAGE USED SPARINGLY?

            o Yes

            o No

E11.9A4-4   IS "SHALL" USED WHENEVER A PROVISION IS
            MANDATORY AND "WILL" USED TO EXPRESS A
            DECLARATION OF PURPOSE OR WHERE SIMPLE FUTURITY
            IS INTENDED?

            o Yes

            o No

E11.9A4-5   ARE "WORK WORDS" USED TO IDENTIFY WORK EFFORT
            AND PERFORMANCE AND NOT "DATA WORDS" TO
            IDENTIFY DATA DELIVERABLES?

            o Yes

            o No

E11.9A4-6   ARE REFERENCE DOCUMENTS AND MILITARY
            SPECIFICATIONS AND STANDARDS SELECTIVELY
            INVOKED TO THE LEVEL REQUIRED TO SATISFY THE
            MINIMAL NEED?

            o Yes

            o No

E11.9A4-7   DOES THE DEMONSTRATION AND EVALUATION (DVAL)
            PHASE SOW CONTAIN DISCRETE DETAIL TO ENABLE THE
            BIDDERS AND SUBSEQUENTLY THE CONTRACTOR TO
            EXPAND THE PROGRAM REQUIREMENTS INTO AN
            EFFECTIVE PROGRAM PLAN, AND THE SYSTEM
            REQUIREMENTS INTO THE SYSTEM TYPE
            SPECIFICATIONS?

            o Yes
              - Include whether system engineering,
                construction of test hardware, and risk
                assessment are part of the effort.

            o No

E11.9A5   SOURCE SELECTION TECHNIQUE AND WEIGHING

E11.9A5-1   DOES SECTION L, INSTRUCTION AND CONDITIONS
                AND NOTICES TO OFFERORS/QUOTERS, INCLUDE A
                "LOGISTICS PROPOSAL" REQUIREMENT AS A PART OF
                THE INSTRUCTIONS FOR PROPOSAL PREPARATION FOR
                COMPLIANCE WITH AR 1000-1, BASIC POLICIES FOR
                SYSTEMS ACQUISITION, WHICH STATES THAT
                "LOGISTICS SUPPORTABILITY WILL BE A DESIGN
                REQUIREMENT AS IMPORTANT AS COST, SCHEDULE,
                AND PERFORMANCE?

                o Yes

                o No

E11.9A5-2   ARE THE FORMAT AND CONTENT DESIRED IN THE
                LOGISTICS PROPOSAL BASED ON DATA REQUIREMENTS
                OF THE INTEGRATED SUPPORT PLAN WHICH IDENTIFIES
                THE SPECIFIC WORK ELEMENTS THAT WILL BE
                PROVIDED IN THE MANAGEMENT AND EXECUTION OF
                THE ILS PROGRAM?

                o Yes

                o No

E11.9A5-3   DOES THE LOGISTICS PROPOSAL SPECIFICALLY
                ENUMERATE THE PROCEDURES, ACTIONS, EVENTS, AND
                ORGANIZATION TO BE EMPLOYED IN ACCOMPLISHING
                THE ILS PROGRAM INCLUDED IN THE SOW AND
                SPECIFICATION?

                o Yes

                o No

E11.9A5-4   TO ASSURE LOGISTICS DESIGN INFLUENCES, DOES THE
                LOGISTICS PROPOSAL INCLUDE A DESCRIPTION OF
                THE MEASURES TO BE EMPLOYED BY THE CONTRACTOR
                TO CONTROL THE TRADEOFF PROCESS BETWEEN DESIGN
                AND LOGISTICS SUPPORT ASPECTS OF PROPOSED
                DESIGNS AND RESPONSIBLE FUNCTIONAL
                ELEMENTS OF THE CONTRACTOR'S ORGANIZATION?

                o Yes

                o No

E11.9A5-5   DOES THE LOGISTICS PROPOSAL REQUIREMENT INCLUDE
             THE CONTRACTOR'S PLAN FOR COORDINATING AND
             INTEGRATING THE DESIGN ELEMENTS (INCLUDING
             ENGINEERING, RELIABILITY, MAINTAINABILITY,
             TECHNICAL MANUALS AND DATA, SPARES AND REPAIR
             PARTS, FACILITIES, TECHNICAL SERVICES, SUPPORT
             EQUIPMENT, TRANSPORTATION AND HANDLING, AND
             TRAINING EQUIPMENT) INTO A SINGLE MANAGEMENT
             EFFORT?

             o Yes

             o No

E11.9A5-6   IS THERE A REQUIREMENT IN THE LOGISTICS PROPOSAL
             TO SUBMIT AN LSA PLAN IN PRELIMINARY FORM WHICH
             WILL THEN BE REFINED AND PROVIDED AFTER CONTRACT
             AWARD AS THE CONTROLLING DOCUMENT FOR THE LSA
             PROGRAM?

             o Yes
               - Indicate whether this describes how the
                 contractor will accomplish the LSA program and
                 if he understands what is required.

             o No

E11.9A5-7   DOES SECTION M, EVALUATION FACTORS FOR AWARDS,
             OF THE RFL INCLUDE LOGISTICS AS PRIMARY
             EVALUATION FACTOR AND ITS RELATIVE ORDER OF
             IMPORTANCE?

             o Yes

             o No

E11.9A5-8   ARE LOGISTICS EVALUATION FACTORS LINKED TO THE ILS
             SOW REQUIREMENTS?

             o Yes

             o No

E11.9A5-9   ARE THE CRITERIA SELECTED FOR EVALUATION FACTORS
             DEFINABLE IN QUALITATIVE OR QUANTITATIVE TERMS
             AND MEASURABLE TO ACCOMPLISH EVALUATION BY
             OBJECTIVELY COMPARING THE PROPOSAL WITH THE
             CRITERIA?

             o Yes

             o No

E11.9A5-10   ARE FUNCTIONAL ACTIVITY MEMBERS OF THE ILSMT
             INCLUDED AS MEMBERS OF THE SOURCE SELECTION
             EVALUATION BOARD (SSEB) AND LISTED IN THE
             APPROVED SELECTION PLAN TOGETHER WITH
             NEGOTIATING PROCEDURES TO BE FOLLOWED DURING
             THE SELECTION PERIOD?

             o Yes

             o No

E11.9A5-11   DURING EVALUATION OF PROPOSALS, CLARIFICATION,
             DISCUSSION AND NEGOTIATION, IS EACH FUNCTIONAL
             EXPERT AUTHORIZED TO RAISE THE APPROPRIATE
             ISSUES TO BE CLARIFIED AND/OR NEGOTIATED AND
             TO RECOMMEND NEGOTIATION POSITIONS?

             o Yes

             o No

E11.9A5-12   IS A WEIGHT FACTOR ASSIGNED TO ALL AREAS,
             ELEMENTS AND FACTORS USED IN EVALUATING THE
             PROPOSALS AS A GAUGE OF THEIR RELATIVE
             IMPORTANCE?

             o Yes
                - Determine if the weights are numerical.
                - Determine if there are supporting narratives
                  required by the evaluator which discuss the
                  strong and weak points considered in the
                  scoring.

             o No

E11.9A5-13　　DID THE OFFEROR UNDERSTAND ILS AND ITS ROLE AS AN
　　　　　　　INTEGRATING MANAGEMENT PROCESS?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-14　　WAS THE OFFEROR'S CONCEPT ADEQUATE FOR ASSURING
　　　　　　　THAT SYSTEM/EQUIPMENT DESIGN WILL BE INFLUENCED BY
　　　　　　　ILS GOALS AND CONSTRAINTS?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-15　　WAS THE OFFEROR'S CONCEPT FOR DEVELOPING AND
　　　　　　　UPDATING AN ISP AND LSAP BASED ON THE REQUIREMENTS
　　　　　　　OF MIL-STDs AND THE WORK EFFORT STATED IN THE SOW?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-16　　DID THE OFFEROR'S PLAN FOR TRACKING ILS AND LSA
　　　　　　　PERFORMANCE IDENTIFY ANY ACTUAL OR POTENTIAL
　　　　　　　BREACH IN CONTRACT STIPULATED ILS GOALS AND
　　　　　　　CONSTRAINTS?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-17　　WERE THE OFFEROR'S METHODS USED TO GENERATE DATA
　　　　　　　FOR REQUIRED LSA ANALYSIS ADEQUATE?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-18　　WAS THE OFFEROR'S APPROACH TO CONDUCT TRADE-OFF
　　　　　　　ANALYSIS AND SENSITIVITY ANALYSIS ADEQUATE?

　　　　　　　o Yes

　　　　　　　o No

E11.9A5-19   WAS THE OFFEROR'S PROPOSED METHODOLOGY FOR
              MEETING LOGISTICS VALIDATION REQUIREMENTS AS PART
              OF THE TEST AND EVALUATION WORK EFFORT PRESCRIBED
              IN THE SOW ADEQUATE?

              o Yes

              o No

E11.9A5-20   WAS THE QUALITY OF THE OFFEROR'S CORPORATE
              BACKGROUND AND PREVIOUS EXPERIENCE INCLUDING ANY
              PROPOSED SUBCONTRACTORS IN ILS/LSA RELATED
              TASKS ACCEPTABLE?

              o Yes

              o No

E11.9A5-21   WAS THE OFFEROR'S PROPOSED ILS ORGANIZATION, LINES
              OF AUTHORITY, AND MANAGEMENT APPROACH TO ASSURE
              LOGISTICS DESIGN INFLUENCE ADEQUATE?

              o Yes

              o No

E11.9A5-22   DID THE OFFEROR'S PERSONNEL AND SUBCONTRACTOR
              PERSONNEL DEMONSTRATE THEIR THEIR CAPABILITY TO
              PERFORM THE ILS/LSA TASKS REQUIRED BY THE SOW?

              o Yes

              o No

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